

University of California  
College of Agriculture  
Agricultural Experiment Station  
Berkeley, California

THE  
COLLEGE OF AGRICULTURE  
COPY 2

STATISTICAL SUPPLEMENT

to

Agricultural Experiment Station Circular 394

DRY EDIBLE BEANS: SITUATION IN CALIFORNIA, 1949

by

Walter D. Fisher and Willard F. Williams

October 1949  
Contribution from the  
Giannini Foundation of Agricultural Economics



Digitized by the Internet Archive  
in 2012 with funding from  
University of California, Davis Libraries

<http://archive.org/details/statisticalsup39449fish>

#### NOTE ON 1948 DATA

All 1948 figures on production and trade in these tables are preliminary. In some cases, production on field run basis was estimated by the authors from preliminary published data on cleaned basis after tables had been completed for earlier years. Source of data for 1948 figures is not cited, but in most cases is the San Francisco Bean Market Review, published by the Federal-State Market News Service, issues from December 1948 through February 1949.



## CONTENTS

	<u>Page</u>
 ACREAGE, YIELD, AND PRODUCTION	
Table 1. All Dry Beans: Acreage, Yield, and Production, United States and California, 1918-1948. . . . .	1
Table 2. All Dry Beans: Production by Major Regions, 1931-1948 . . . . .	2
Table 3. Dry Edible Beans; Main Variety Groups: Production in the United States and in California, 1919-1948 . . . . .	3
Table 4. Dry Beans by Variety: Production in California, 1919-1948 . . . . .	4
Table 5. Dry Beans by Variety: Production in the United States, 1919-1948. . . . .	6
Table 6. Dry Beans, Four Varieties: Production in Major States Outside of California, 1919-1948 . . . . .	8
Table 7. Dry Edible Beans: Production of Principal Varieties Within California by Four Areas, 1936-1948. . . . .	10
Table 8. Dry Edible Beans, Lima and Other Varieties: Acreage and Production in California by Principal Producing Counties, 1939 and 1944 . . . . .	12
 FOREIGN PRODUCTION AND TRADE	
Table 9. Production of Dry Edible Beans in Specified Countries of the World, 1930-1944 . . . . .	14
Table 10. Imports of Dry Edible Beans and Garbanzos into the United States, 1926-1948. . . . .	15
Table 11. Shipments of Dry Edible Beans from Continental United States to Foreign and Overseas Territory (Including Lend-Lease and UNRRA Shipments, Excluding United States Armed Forces), 1931-1948. . . . .	17
Table 12. United States Exports of Dry Edible Beans, Excluding United States Territories (Including Lend-Lease and UNRRA, Excluding United States Armed Forces), 1931-1948. . . . .	18
Table 13. Shipments of Dry Edible Beans from Continental United States to United States Territories . . . . .	19
Table 14. Dry Edible Beans: Balance of Trade of Major Nations and Geographical Divisions of the World, 1929-1933 . . . . .	20

THE UNIVERSITY OF CHICAGO

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations
2. 
$$\frac{dx}{dt} = f(x, y), \quad \frac{dy}{dt} = g(x, y),$$
3. where  $f$  and  $g$  are continuous functions of  $x$  and  $y$  in a region  $R$  of the  $xy$ -plane.
4. It is shown that if  $f$  and  $g$  are continuous in  $R$  and if  $f$  is bounded in  $R$ , then there exists a solution of the system in  $R$  which is defined for all  $t$  in the interval  $(-\infty, \infty)$ .
5. The second part of the paper is devoted to a study of the stability of the solutions of the system of equations
6. 
$$\frac{dx}{dt} = f(x, y), \quad \frac{dy}{dt} = g(x, y),$$
7. where  $f$  and  $g$  are continuous functions of  $x$  and  $y$  in a region  $R$  of the  $xy$ -plane.
8. It is shown that if  $f$  and  $g$  are continuous in  $R$  and if  $f$  is bounded in  $R$ , then there exists a solution of the system in  $R$  which is defined for all  $t$  in the interval  $(-\infty, \infty)$ .
9. The third part of the paper is devoted to a study of the stability of the solutions of the system of equations
10. 
$$\frac{dx}{dt} = f(x, y), \quad \frac{dy}{dt} = g(x, y),$$
11. where  $f$  and  $g$  are continuous functions of  $x$  and  $y$  in a region  $R$  of the  $xy$ -plane.
12. It is shown that if  $f$  and  $g$  are continuous in  $R$  and if  $f$  is bounded in  $R$ , then there exists a solution of the system in  $R$  which is defined for all  $t$  in the interval  $(-\infty, \infty)$ .

THE UNIVERSITY OF CHICAGO

13. The fourth part of the paper is devoted to a study of the stability of the solutions of the system of equations
14. 
$$\frac{dx}{dt} = f(x, y), \quad \frac{dy}{dt} = g(x, y),$$
15. where  $f$  and  $g$  are continuous functions of  $x$  and  $y$  in a region  $R$  of the  $xy$ -plane.
16. It is shown that if  $f$  and  $g$  are continuous in  $R$  and if  $f$  is bounded in  $R$ , then there exists a solution of the system in  $R$  which is defined for all  $t$  in the interval  $(-\infty, \infty)$ .
17. The fifth part of the paper is devoted to a study of the stability of the solutions of the system of equations
18. 
$$\frac{dx}{dt} = f(x, y), \quad \frac{dy}{dt} = g(x, y),$$
19. where  $f$  and  $g$  are continuous functions of  $x$  and  $y$  in a region  $R$  of the  $xy$ -plane.
20. It is shown that if  $f$  and  $g$  are continuous in  $R$  and if  $f$  is bounded in  $R$ , then there exists a solution of the system in  $R$  which is defined for all  $t$  in the interval  $(-\infty, \infty)$ .
21. The sixth part of the paper is devoted to a study of the stability of the solutions of the system of equations
22. 
$$\frac{dx}{dt} = f(x, y), \quad \frac{dy}{dt} = g(x, y),$$
23. where  $f$  and  $g$  are continuous functions of  $x$  and  $y$  in a region  $R$  of the  $xy$ -plane.
24. It is shown that if  $f$  and  $g$  are continuous in  $R$  and if  $f$  is bounded in  $R$ , then there exists a solution of the system in  $R$  which is defined for all  $t$  in the interval  $(-\infty, \infty)$ .
25. The seventh part of the paper is devoted to a study of the stability of the solutions of the system of equations
26. 
$$\frac{dx}{dt} = f(x, y), \quad \frac{dy}{dt} = g(x, y),$$
27. where  $f$  and  $g$  are continuous functions of  $x$  and  $y$  in a region  $R$  of the  $xy$ -plane.
28. It is shown that if  $f$  and  $g$  are continuous in  $R$  and if  $f$  is bounded in  $R$ , then there exists a solution of the system in  $R$  which is defined for all  $t$  in the interval  $(-\infty, \infty)$ .



## STOCKS, SUPPLY, AND DISAPPEARANCE

Table 15. All Dry Beans: Stocks, Production, Imports, Exports, Supply, and Disappearance, 1924-1947. . . . .	21
Table 16. Stocks of Dry Edible Beans in California Warehouses, 1924-1948 . . . . .	23
Table 17. Stocks of Dry Edible Beans in the United States, 1932-1946 . . .	25
Table 18. Dry Beans, Lima Varieties: United States Stocks, Supply, and Disappearance, 1924-1948. . . . .	26
Table 19. Dry Beans, Three California Varieties: Stocks, Supply, and Disappearance, 1924-1948. . . . .	28
Table 20. Dry Beans, Principal White Varieties: United States Stocks, Supply, and Disappearance, 1932-1946 . . . . .	30
Table 21. Dry Beans, Principal Colored Varieties: United States Stocks, Supply, and Disappearance, 1932-1946 . . . . .	32

## UTILIZATION

Table 22. United States Packs of Canned Dried Edible Beans and Green Lima Beans, 1929-1946 . . . . .	34
Table 23. Conversion Factors Used in Converting From Cases of Canned Dried Beans to Pounds of Dry Edible Beans . . . . .	36
Table 24. Dry Beans, California Varieties: Estimated Percentage of Production Sold to Cannery, 1936-1947 . . . . .	37
Table 25. Dry Beans, Three Main Variety Groups: Estimated Utilization in the United States, Average 1936-1940 . . . . .	38

## CONSUMPTION AND MARKETS

Table 26. All Dry Beans and Main Variety Groups: Estimated Annual Per- Capita Consumption by Average Periods, 1909-1945. . . . .	39
Table 27. Dry Beans and Canned Dry Beans: Estimated Annual Consumption by Geographic Region, Average 1936-1940 . . . . .	40
Table 28. Beans Marketed Dry, Principal Varieties: Percentage Distri- bution of Each Variety Among Geographic Regions, 1939-1940. . . . .	42
Table 29. Beans Marketed Dry, Principal Varieties: Percentage Distri- bution of Each Variety Among Geographic Regions, 1930-1931. . . . .	43
Table 30. Beans Marketed Dry, Principal Varieties: Percentage Distri- bution of Varieties Within Each of Four Geographic Regions, 1930-1931 and 1939-1940 . . . . .	44





Table 31. Annual Adjusted Income: Distribution by Income Level in Five Region-Urban-Color Groups of the United States, 1935-1936. . . . .	45
Table 32. Dry Navy Beans and Canned Baked Beans: Consumption by Income Level in Five Region-Urban-Color Groups in the United States, 1935-1936 . . . . .	47
Table 33. Income Distribution in the United States and Per-Capita Consumption of Dry Beans and Canned Dry Beans by Income Levels, 1941-1942 . . . . .	49
Table 34. All Dry Beans and Blackeyes: Estimated Consumption in the United States by Three Racial Groups and Two Major Regions, 1934-1936 . .	50

#### PRICES AND MARKETING MARGINS

Table 35. All Dry Beans: Prices Received by Growers in Selected States, 1924-1948 . . . . .	51
Table 36. Dry Beans, Principal California Varieties: Dealers' F.O.B. Prices, 1924-1948 . . . . .	52
Table 37. All Dry Beans: Production and Marketing Costs as Percentage of Consumers' Dollar - United States, 1939. . . . .	53



TABLE 1

1.

All Dry Beans: Acreage, Yield, and Production,  
United States and California, 1913-1948

Crop year	Acreage			Yield per acre <sup>a/</sup>		Production	
	United States		Calif- ornia <sup>b/</sup>	United States	Calif- ornia	United States	Calif- ornia
	planted	harvested					
	1	2	3	4	5	6	7
	thousand acres			pounds		thousand bags of 100 pounds each, cleaned basis	
1918	1,787	1,625	592	639	870	9,281	4,635
1919	1,127	1,089	472	751	834	7,799	3,779
1920	964	926	300	663	600	5,809	1,656
1921	905	875	272	707	300	5,772	2,024
1922	1,254	1,138	324	700	957	7,324	2,852
1923	1,387	1,330	299	729	917	8,955	2,577
1924	1,302	1,584	206	573	762	8,410	1,423
1925	1,859	1,615	240	732	1,111	10,755	2,507
1926	2,121	1,740	305	634	1,087	9,669	3,148
1927	1,747	1,612	296	605	948	9,108	2,665
1928	1,374	1,651	307	640	1,020	9,900	2,381
1929	1,924	1,845	339	666	1,000	11,561	3,153
1930	2,266	2,160	363	664	1,175	13,540	4,009
1931	2,145	1,947	334	662	1,038	11,970	3,155
1932	1,625	1,431	225	766	1,104	10,410	2,310
1933	1,895	1,729	275	738	1,280	12,065	3,344
1934	1,985	1,461	299	730	1,232	10,656	3,463
1935	2,087	1,865	339	769	1,170	13,333	3,569
1936	1,950	1,626	347	727	1,176	10,767	3,795
1937	1,911	1,695	336	934	1,391	14,940	5,101
1938	1,759	1,643	349	956	1,307	14,717	4,333
1939	1,876	1,679	340	896	1,174	14,254	3,752
1940	2,079	1,903	391	890	1,404	15,790	5,216
1941	2,250	2,019	389	919	1,321	17,100	4,831
1942	2,102	1,925	383	936	1,278	17,568	4,649
1943	2,599	2,362	439	889	1,177	19,435	4,755
1944	2,155	1,996	323	809	1,190	15,060	3,574
1945	1,656	1,485	307	881	1,159	11,954	3,274
1946	1,698	1,617	233	977	1,267	14,737	3,264
1947	1,839	1,759	323	976	1,351	15,726	4,048
1948	1,817	1,917	368	1,087	1,473	19,429	4,960
Averages:							
1918-1920	1,293	1,213	455	684	768	7,630	3,357
1921-1925	1,441	1,308	263	688	909	8,243	2,278
1926-1930	1,986	1,802	322	642	1,046	10,756	3,171
1931-1935	1,947	1,637	294	745	1,165	11,687	3,168
1936-1940	1,915	1,709	363	881	1,290	14,094	4,439
1941-1945	2,152	1,957	363	397	1,225	16,223	4,217

<sup>a/</sup> Yield per harvested acre.

<sup>b/</sup> Planted acreage is equal to harvested acreage, except planted acreage in 1939 is 349,000 acres; in 1945 314,000 acres.

Sources of data: Cols. 1, 2, 4, 6: U.S. Production and Marketing Administration. Bean Market Review, vol. 18, no. 6, Feb. 6, 1947 (for years 1913-1933 and 1945-1946); vol. 19, no. 28, July 15, 1948. (for 1947); U.S. Bureau of Agricultural Economics. Field and Seed Crops - Acreage, Yield and Production. Revised estimates (for years 1939-1944; production cleaned basis from Table 15 below), and Cols. 3, 5, 7: California Crop and Livestock Reporting Service. California Field Crops Statistics, 1866-1946. Sacramento, July 1947. Table 15 (for years 1918-1946). U.S. Production and Marketing Administration. Bean Market Review, vol. 19, no. 28, July 15, 1948.





TABLE 2

## All Dry Beans: Production by Major Regions, 1931-1948

Crop year	New York and Michigan	Idaho, Montana, Nebraska, and Wyoming	Colorado, New Mexico, and Arizona	California	Other states
thousands of bags of 100 pounds, cleaned basis					
1931	4,558	2,548	1,548	3,155	161
1932	5,817	1,395	749	2,310	139
1933	4,967	1,958	1,630	3,344	166
1934	5,031	1,605	440	3,463	117
1935	5,574	1,988	2,057	3,569	145
1936	3,135	2,070	1,592	3,795	125
1937	5,263	2,825	1,577	5,101	174
1938	5,902	2,414	1,840	4,333	228
1939	5,966	2,336	2,000	3,752	217
1940	4,845	2,726	2,817	5,216	195
1941	6,268	3,060	2,704	4,831	252
1942	6,174	3,733	2,744	4,649	236
1943	6,146	5,039	3,217	4,755	300
1944	5,066	3,830	2,379	3,574	209
1945a/	3,415	3,368	2,112	3,262	156
1946	4,952	4,474	1,741b/	3,333	236
1947	4,127	4,771	2,603b/	3,997	228
1948	6,336	5,315	2,564b/	4,960	254
Averages:					
1931-1935	5,189	1,899	1,285	3,168	146
1936-1940	5,032	2,474	1,965	4,439	188
1941-1945	5,414	3,806	2,631	4,214	231
Per cent of U.S. total			Per cent		
Averages:					
1931-1935	44.4	16.2	11.0	27.1	1.2
1936-1940	35.7	17.5	13.9	31.5	1.3
1941-1945	33.2	23.4	16.1	25.9	1.4

a/ 1945 data unrevised.

b/ Excludes Arizona.

## Sources of data:

1931-1938: U.S. Bureau of Agricultural Economics. Farm Production, Disposition, and Value of Dry Edible Beans, Washington, D. C., Nov. 1944.

1939-1944: U.S. Bureau of Agricultural Economics. Field and Seed Crops, Acreage, Yield, and Production Revised Estimates, 1939-1944, Washington, D. C., April 1947, p. 39. Using the proportion between cleaned and uncleaned in unrevised estimates from U.S. Department of Agriculture, Agricultural Statistics, to determine cleaned production.

1945: U.S. Department of Agriculture. Crops and Markets, January 1946, p. 19.

1946-1947: U.S. Production and Marketing Administration. Bean Market Review, vol. 19, no. 1, January 8, 1948, cleaned production estimated from uncleaned on basis of percentage of United States total.





Dry Edible Beans; Main Variety Groups:  
Production in the United States and in California, 1919-1948

Crop year	White varieties <sup>a/</sup>		Colored varieties <sup>b/</sup>		Lima varieties <sup>c/</sup>	Other varieties and seed	
	U.S.	Calif.	U.S.	Calif.	Calif. (and U.S.) <sup>d/</sup>	U.S.	Calif.
	1	2	3	4	5	6	7
	thousands of bags, field run						
1919	3,631	760	2,059	1,175	1,440	969	561
1920	3,035	160	1,488	477	1,100	419	63
1921	2,555	120	2,340	1,115	825	365	116
1922	3,732	325	2,041	1,110	1,508	620	157
1923	4,807	360	3,004	1,168	1,050	726	163
1924	5,046	77	2,788	687	705	560	100
1925	6,132	200	3,391	1,297	1,100	586	70
1926	5,546	180	3,316	1,228	1,830	332	76
1927	4,649	280	3,379	1,115	1,320	389	90
1928	5,301	424	3,530	1,336	1,291	452	81
1929	5,695	415	4,505	1,395	1,473	616	107
1930	5,870	489	5,868	1,799	1,798	804	179
1931	6,564	444	3,985	1,172	1,727	623	139
1932	6,780	230	2,503	949	1,194	488	115
1933	6,457	420	4,116	1,377	1,573	618	153
1934	6,161	403	2,845	1,336	1,780	614	166
1935	6,801	352	5,396	1,987	1,525	614	103
1936	4,899	504	4,354	1,492	1,995	575	92
1937	7,862	1,024	4,684	1,664	2,561	723	120
1938	7,408	540	5,240	1,657	2,259	743	105
1939	6,771	420	5,778	1,602	1,792	688	177
1940	6,988	651	7,076	2,550	2,126	650	163
1941	8,875	966	6,543	1,779	2,225	844	169
1942	9,434	799	6,417	1,708	2,180	932	207
1943	10,100	648	7,270	1,737	2,463	1,089	271
1944	7,572	499	5,267	969	2,203	1,017	172
1945	6,242	424	3,964	917	2,062	815	156
1946	8,190	391	4,916	1,043	2,000	753	153
1947	7,912	553	6,490	1,552	2,095	667	163
1948	10,065	785	7,772	2,175	2,313	658	135
Averages:							
1919-1925	4,134	286	2,516	1,004	1,104	606	246
1926-1930	5,412	358	4,120	1,375	1,542	519	107
1931-1935	6,548	365	3,769	1,364	1,560	591	135
1936-1940	6,735	627	5,426	1,793	2,147	676	131
1941-1945	8,444	667	5,892	1,432	2,227	939	195

<sup>a/</sup> White varieties include Pea and Medium White, Great Northern, Small White, White Marrow, White Kidney, and Large White, 1931-1936.

<sup>b/</sup> Colored varieties include Yelloweye, Pinto, Red Kidney, Pink, Small Red, Cranberry, and Blackeye.

<sup>c/</sup> Includes Standard and Baby Limas.

<sup>d/</sup> For years 1933-1941 include a few Baby Limas outside of California. See Table 4, footnote d.

Sources of data:

U.S. Production and Marketing Administration. Bean Market Review, vol. 17, no. 4, January 24, 1946; vol. 18, no. 5, January 30, 1947; and vol. 19, special issue, January 29, 1948.



TABLE 4

Dry Beans by Variety: Production in California, 1919-1948

Crop year	Varieties grown mainly in California				Varieties grown mainly outside California <sup>a/</sup>					
	Small white <sup>a/</sup>	Standard Lima	Baby Lima <sup>b/</sup>	Black- eye	Pink <sup>a/</sup>	Pinto	Red Kidney	Small red	Cran- berry	Other varieties
	1	2	3	4	5	6	7	8	9	10
	thousands of bags of 100 pounds each, field run									
1919	760	1,265	175	230	720	0	60	75	90	561
1920	160	845	255	190	200	0	32	30	25	63
1921	120	675	150	380	525	0	50	120	40	116
1922	325	1,368	140	250	650	0	60	75	75	157
1923	360	830	220	275	650	0	40	60	143	163
1924	77	480	225	277	260	0	20	60	70	100
1925	200	800	300	450	625	0	30	132	60	70
1926	180	1,250	580	450	580	0	45	80	73	76
1927	280	1,010	310	300	520	0	60	125	110	90
1928	424	890	401	428	547	51	69	135	106	81
1929	415	987	486	514	594	51	47	82	107	107
1930	489	1,102	696	852	607	72	76	72	120	179
1931	429	1,064	663	459	423	15	119	9	147	139
1932	226	872	322	275	505	24	28	46	71	115
1933	417	943	630	587	587	62	32	12	97	153
1934	402	1,072	708	525	478	121	61	29	122	166
1935	351	989	536	615	835	285	71	42	139	103
1936	502	1,119	876	765	442	130	76	26	53	92
1937	1,024	1,419	1,142	857	452	160	99	39	57	120
1938	540	1,395	864	512	637	283	95	55	75	105
1939	420	1,139	653	573	457	386	59	39	88	177
1940	651	1,290	836	1,154	875	342	103	56	20	163
1941	966	1,326	899	704	586	206	180	57	46	169
1942	799	1,355	825	733	572	224	116	17	46	207
1943	648	1,335	1,128	896	530	193	93	39	36	271
1944	499	1,191	1,012	444	299	136	54	16	20	172
1945	424	979	1,083	452	299	54	79	17	16	156
1946	391	841	1,159	436	378	90	113	18	8	153
1947	553	919	1,176	694	515	148	135	42	18	163
1948	785	1,224	1,089	1,177	629	128	197	19	25	135

(Continued on next page)



THE UNIVERSITY OF CHICAGO

DEPARTMENT OF THE HISTORY OF ARTS

RECEIVED

1961

1961

1961

1961

1961

1961

1961

1961

Table 4 continued.

Crop year	Varieties grown mainly in California				Varieties grown mainly outside California <sup>a/</sup>					
	Small white <sup>a/</sup>	Standard Lima	Baby Lima <sup>b/</sup>	Black eye	Pink <sup>a/</sup>	Pinto	Red Kidney	Small red	Crab- berry	Other varieties
	1	2	3	4	5	6	7	8	9	10
thousands of bags of 100 pounds each, field run										
Averages:										
1921-1925	216	831	207	326	542	0	40	89	78	121
1926-1930	358	1,048	495	509	570	35	59	99	103	107
1931-1935	365	988	572	492	566	101	62	28	115	135
1936-1940	627	1,272	874	772	573	260	96	43	59	131
1941-1945	667	1,237	989	646	457	163	104	29	33	195

<sup>a/</sup> See table 5 for United States production.<sup>b/</sup> Production outside California: 1938, 54,000 bags; 1939, 32,000 bags; 1940, 39,000 bags; 1941, 16,000 bags.

## Sources of data:

- 1919-1928: U.S. Bureau of Agricultural Economics. Production of Beans in the United States by Commercial Classes, 1919-1936. Washington, D.C., January 1937, p. 8.
- 1929-1931: U.S. Production and Marketing Administration. Bean Market Review. Washington, D.C., May 4, 1944.
- 1932-1946: Ibid. Vol. 18, no. 5, January 30, 1947.
- 1947: Ibid. Vol. 19, no. 1, January 8, 1948.





TABLE 5

Dry Beans by Variety:<sup>a/</sup> Production in the United States, 1919-1948

Crop year	White varieties				Colored varieties						Other varieties <sup>b/</sup>
	Small white	Pea and medium white	Great northern	All other whites	Pinto	Pink	Red Kidney	Small red	Cran- berry		
	1	2	3	4	5	6	7	8	9	10	
	thousands of bags of 100 pounds each, field run										
1919	760	2,793	0	78	618	745	222	75	90	1,048	
1920	160	2,763	0	112	713	232	215	30	25	502	
1921	120	2,281	0	154	742	560	395	120	40	468	
1922	325	3,233	29	145	352	661	510	75	75	738	
1923	360	4,120	165	162	1,079	670	645	60	143	858	
1924	77	4,121	594	254	1,034	282	881	73	70	731	
1925	200	4,944	739	249	1,597	653	862	163	60	692	
1926	180	4,318	922	126	1,287	599	698	113	73	428	
1927	280	3,031	1,208	130	1,597	553	490	220	110	498	
1928	424	3,358	1,387	132	1,402	575	642	282	106	547	
1929	415	3,354	1,749	177	2,320	619	443	396	113	716	
1930	489	3,143	2,019	219	3,280	625	378	524	128	886	
1931	429	3,850	1,958	312	1,661	435	653	479	159	962	
1932	226	5,396	994	160	819	515	467	254	94	567	
1933	417	4,385	1,442	209	1,818	595	575	283	151	725	
1934	402	4,389	1,087	282	586	485	559	272	242	790	
1935	351	4,700	1,528	221	2,477	844	620	298	394	762	
1936	502	2,664	1,603	128	1,850	448	697	252	228	689	
1937	1,031	4,270	2,310	251	1,911	454	839	263	192	891	
1938	552	4,717	1,909	230	2,339	637	992	295	274	934	
1939	438	4,403	1,704	226	2,742	457	869	310	671	844	
1940	671	4,267	1,902	148	3,628	875	668	372	280	749	
1941	974	5,335	2,374	192	3,311	586	1,187	396	255	948	
1942	821	5,300	3,103	210	3,429	572	882	364	296	1,073	
1943	678	5,343	3,966	113	4,342	530	670	399	276	1,246	
1944	564	4,223	2,729	56	3,475	299	515	306	117	1,128	
1945	424	3,032	2,724	62	2,187	299	594	249	107	891	
1946	391	3,999	3,742	58	2,309	378	1,290	338	80	799	
1947	553	3,380	3,919	60	3,430	515	1,155	532	78	722	
1948	785	4,667	4,455	158	3,368	629	1,840	494	147	775	

(Continued on next page)

一、  
二、  
三、  
四、  
五、  
六、  
七、  
八、  
九、  
十、

一、  
二、  
三、  
四、  
五、  
六、  
七、  
八、  
九、  
十、

Table 5 continued.

Crop year	White varieties				Colored varieties					Other b/ varieties
	Small white	Pea and medium white	Great northern	All other whites	Pinto	Pink	Red Kidney	Small red	Cran- berry	
	1	2	3	4	5	6	7	8	9	
thousands of bags of 100 pounds each, field run										
Averages:										
1921-1925	216	3,740	305	193	961	565	659	98	78	697
1926-1930	358	3,441	1,457	157	1,977	594	530	307	106	615
1931-1935	365	4,544	1,402	237	1,472	575	575	317	208	721
1936-1940	639	4,064	1,886	197	2,494	574	813	298	329	821
1941-1945	692	4,647	2,979	127	3,349	457	770	343	210	1,057

a/ For Standard Limas, Baby Limas, and Blackeyes, see table 4.

b/ Yelloweyes and others grown exclusively outside California.

Sources of data:

- 1919-1928: U.S. Bureau of Agricultural Economics. Production of Beans in the United States by Commercial Classes, 1919-1936. Washington, D.C., January 1937.  
 1929-1931: U.S. Production and Marketing Administration. Bean Market Review. Washington, D.C., May 4, 1944.  
 1932-1946: Ibid. Vol. 18, no. 5, January 30, 1947.  
 1947: Ibid. Vol. 19, no. 1, January 18, 1948.

71551	10
71552	11
71553	12
71554	13
71555	14
71556	15
71557	16
71558	17
71559	18
71560	19
71561	20
71562	21
71563	22
71564	23
71565	24
71566	25
71567	26
71568	27
71569	28
71570	29
71571	30
71572	31
71573	32
71574	33
71575	34
71576	35
71577	36
71578	37
71579	38
71580	39
71581	40
71582	41
71583	42
71584	43
71585	44
71586	45
71587	46
71588	47
71589	48
71590	49
71591	50
71592	51
71593	52
71594	53
71595	54
71596	55
71597	56
71598	57
71599	58
71600	59
71601	60
71602	61
71603	62
71604	63
71605	64
71606	65
71607	66
71608	67
71609	68
71610	69
71611	70
71612	71
71613	72
71614	73
71615	74
71616	75
71617	76
71618	77
71619	78
71620	79
71621	80
71622	81
71623	82
71624	83
71625	84
71626	85
71627	86
71628	87
71629	88
71630	89
71631	90
71632	91
71633	92
71634	93
71635	94
71636	95
71637	96
71638	97
71639	98
71640	99
71641	100



TABLE 6

Dry Beans, Four Varieties: Production in Major States  
Outside of California, 1919-1948

	Pea and medium white		Great Northern				Pinto				Red Kidney	
	New York	Michigan	Idaho	Montana	Nebraska	Wyoming	Colorado	New Mexico	Wyoming	New York	Michigan	
	1	2	3	4	5	6	7	8	9	10	11	
	thousands of bags of 100 pounds each, field run											
1919	174	2,478	0	0	0	0	137	476	0	58	104	
1920	165	2,494	0	0	0	0	190	516	0	78	105	
1921	193	2,006	0	0	0	0	157	575	0	167	178	
1922	309	2,781	0	19	0	10	205	143	0	299	151	
1923	345	3,550	0	140	0	25	691	382	0	335	270	
1924	345	3,631	374	172	0	48	521	496	0	444	412	
1925	233	4,530	490	192	0	57	1,324	246	6	195	630	
1926	145	4,036	575	247	0	91	816	434	12	141	505	
1927	196	2,726	801	287	0	113	1,031	494	32	148	275	
1928	233	2,935	783	359	15	189	946	337	7	180	383	
1929	306	2,905	1,061	406	25	236	1,204	968	8	198	189	
1930	310	2,613	1,149	394	40	360	2,469	576	26	155	133	
1931	506	3,208	1,255	242	50	392	833	745	5	313	198	
1932	566	4,723	612	192	75	108	401	343	1	169	255	
1933	443	3,803	817	239	87	285	1,168	518	0	337	191	
1934	456	3,819	655	124	48	253	367	69	0	327	153	
1935	358	4,226	769	225	90	411	1,528	569	24	381	156	
1936	259	2,315	974	146	116	355	1,140	434	76	429	172	
1937	495	3,665	1,356	194	222	514	880	649	153	508	213	
1938	588	4,024	1,018	162	237	470	1,529	312	93	628	242	
1939	405	3,923	920	147	191	420	1,524	514	144	531	258	
1940	290	3,843	968	183	285	431	1,886	969	201	363	186	
1941	393	4,817	1,120	222	393	612	1,556	1,224	143	799	183	
1942	449	5,462	1,211	308	518	772	1,790	1,068	144	689	132	
1943	399	4,727	1,514	522	865	976	3,008	785	284	536	56	
1944	195	3,928	1,061	209	558	838	2,005	833	319	460	24	
1945	135	2,810	936	199	704	859	1,512	287	139	495	17	
1946	237	3,691	1,354	308	965	1,069	1,586	305	135	1,085	26	
1947	307	3,017	1,308	350	1,025	1,228	2,480	271	166	989	27	
1948	377	4,248	1,463	350	1,458	1,184	2,239	437	124	1,605	34	

(Continued on next page)





Table 6 continued.

	Pea and medium white			Great Northern			Pinto			Red Kidney	
	New York	Michigan	Idaho	Montana	Nebraska	Wyoming	Colorado	New Mexico	Wyoming	New York	Michigan
	1	2	3	4	5	6	7	8	9	10	11
Averages:											
1921-1925	285	3,300	173	105	0	28	580	368	1	288	328
1926-1930	238	3,043	874	339	16	198	1,293	562	17	164	297
1931-1935	466	3,956	822	204	70	290	859	449	6	305	191
1936-1940	407	3,554	1,047	166	210	438	1,392	576	133	492	214
1941-1945	314	4,349	1,168	292	608	811	1,974	839	206	596	82

thousands of bags of 100 pounds each, field run

## Sources of data:

- 1919-1928: U.S. Bureau of Agricultural Economics. Production of Beans in the United States by Commercial Classes, 1919-1936. Washington, D.C., January 1937.
- 1929-1941: U.S. Bureau of Agricultural Economics. Dry Beans, Revised Estimates of Acreage and Production, 1921-1941. Washington, D.C., March 1943, pp. 5-9.
- 1942-1944: U.S. Bureau of Agricultural Economics. Production of Dry Beans by Kinds. Washington, D.C. (Annual Issues)
- 1945-1946: U.S. Bureau of Agricultural Economics. Production of Dry Beans and Dry Peas by Classes, 1945-1946. Washington, D.C., December 1946.
- 1947: U.S. Production and Marketing Administration. Bean Market Review. Washington, D.C. Vol. 19, Special No. January 29, 1948.

98288	100
98289	100
98290	100
98291	100
98292	100
98293	100
98294	100
98295	100
98296	100
98297	100
98298	100
98299	100
98300	100

The following table shows the results of the experiments conducted on the 100th day of the year 1900. The results are given in the form of a table, with the first column containing the number of the experiment, and the second column containing the results. The results are given in the form of a table, with the first column containing the number of the experiment, and the second column containing the results.

TABLE 7  
Dry Edible Beans: Production of Principal Varieties  
Within California by Four Areas<sup>a</sup>, 1936-1948

Crop year	Small White			Red Kidney			Standard Lima	
	South	Coast	Rest of state	San Joaquin	Sacramento	Rest of state	South	Rest of state
thousand bags of 100 pounds each, field run								
1936	71	430	1	34	32	11	1,116	3
1937	173	851	--	48	37	14	1,416	3
1938	80	460	--	42	39	14	1,386	9
1939	41	379	1	33	19	7	1,132	7
1940	94	557	--	64	30	9	1,283	7
1941	123	841	2	111	54	16	1,317	10
1942	184	612	3	91	16	9	1,354	2
1943	162	484	2	71	17	4	1,335	--
1944	90	409	1	47	5	2	1,191	--
1945	69	355	1	62	3	1	977	2
1946	48	342	1	95	17	1	840	1
1947	65	483	6	114	11	11	910	9
1948	114	667	4	167	20	11	1,176	49
Average								
1936-1940	92	535	--	44	31	11	1,267	6
1941-1945	126	540	2	76	19	6	1,235	3

Crop year	Baby Lima				Blackeye			
	South	Coast	San Joaquin	Sacramento	South	Coast	San Joaquin	Sacramento
thousand bags of 100 pounds each, field run								
1936	205	24	529	118	288	1	400	76
1937	288	14	712	129	393	1	410	53
1938	184	9	571	100	247	2	233	30
1939	104	6	474	70	263	4	277	29
1940	104	4	573	155	430	13	637	74
1941	122	7	574	197	247	6	415	37
1942	133	12	482	198	272	9	402	50
1943	148	19	569	392	259	10	546	82
1944	92	12	554	354	204	4	192	44
1945	139	19	530	396	178	2	246	26
1946	124	31	589	414	163	2	228	44
1947	94	22	678	382	249	2	370	73
1948	76	13	656	344	316	1	700	160
Average								
1936-1940	177	11	572	114	324	4	391	52
1941-1945	127	12	542	307	232	6	360	48

Continued on next page.

# THE UNIVERSITY OF CHICAGO LIBRARY

Author		Title		Date		Volume	
A. B. C.		1. The ABC of the ABC		1891		1.1	
A. B. C.		2. The ABC of the ABC		1892		1.2	
A. B. C.		3. The ABC of the ABC		1893		1.3	
A. B. C.		4. The ABC of the ABC		1894		1.4	
A. B. C.		5. The ABC of the ABC		1895		1.5	
A. B. C.		6. The ABC of the ABC		1896		1.6	
A. B. C.		7. The ABC of the ABC		1897		1.7	
A. B. C.		8. The ABC of the ABC		1898		1.8	
A. B. C.		9. The ABC of the ABC		1899		1.9	
A. B. C.		10. The ABC of the ABC		1900		1.10	

Author		Title		Date		Volume	
A. B. C.		1. The ABC of the ABC		1891		1.1	
A. B. C.		2. The ABC of the ABC		1892		1.2	
A. B. C.		3. The ABC of the ABC		1893		1.3	
A. B. C.		4. The ABC of the ABC		1894		1.4	
A. B. C.		5. The ABC of the ABC		1895		1.5	
A. B. C.		6. The ABC of the ABC		1896		1.6	
A. B. C.		7. The ABC of the ABC		1897		1.7	
A. B. C.		8. The ABC of the ABC		1898		1.8	
A. B. C.		9. The ABC of the ABC		1899		1.9	
A. B. C.		10. The ABC of the ABC		1900		1.10	



Table 7, continued.

Crop year	Pintos			Pinks			
	San Joaquin	Sacramento	Rest of state	South	Coast	San Joaquin	Sacramento
thousand bags of 100 pounds each, field run							
1936	78	39	13	24	199	42	177
1937	119	33	8	35	233	33	152
1938	181	91	12	43	249	29	316
1939	235	117	34	24	222	15	196
1940	175	150	16	51	306	27	491
1941	93	107	6	25	138	24	400
1942	144	78	3	33	147	23	369
1943	107	83	3	21	119	19	371
1944	96	38	1	17	69	2	212
1945	29	22	3	13	32	4	249
1946	61	27	3	17	65	7	290
1947	93	50	5	11	60	26	419
1948	76	49	2	13	19	51	546
Average							
1936-1940	158	86	17	35	242	29	266
1941-1945	94	66	3	22	101	14	320

Crop year	Miscellaneous <sup>b/</sup>			All varieties			
	South	Coast	Rest of state	South	Coast	San Joaquin	Sacramento
thousand bags of 100 pounds each, field run							
1936	47	71	53	1,759	742	1,096	485
1937	87	61	68	2,404	1,173	1,344	449
1938	73	81	83	2,027	820	1,069	647
1939	122	119	62	1,706	757	1,039	488
1940	122	41	78	2,100	938	1,484	971
1941	128	54	90	1,967	1,070	1,227	875
1942	138	85	47	2,121	871	1,146	756
1943	194	98	54	2,123	732	1,332	983
1944	140	37	32	1,734	533	899	677
1945	118	35	36	1,495	448	875	728
1946	106	49	24	1,300	491	987	809
1947	127	49	48	1,457	636	1,298	972
1948	88	62	33	1,798	780	1,694	1,110
Average							
1936-1940	90	75	69	1,999	886	1,206	608
1941-1945	144	62	52	1,888	731	1,096	804

a/ Areas defined to include following counties: South: Santa Barbara, Ventura, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Imperial; Coast: Alameda, Contra Costa, Lake, Marin, Monterey, Napa, San Benito, San Francisco, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Sonoma, and Humboldt; San Joaquin: All counties in the San Joaquin Valley including San Joaquin; Sacramento: All counties in the Sacramento Valley.

b/ Includes Small Red, Cranberry Bayos, and other minor varieties.

Source of data:

California Crop and Livestock Reporting Service. For 1936-1946 data, California Field Crop Statistics, 1866-1946. Sacramento. July 1947, table 17. For 1947 data, issue of January 15, 1948, Annual Field Crop Summary.





TABLE 8

Dry Edible Beans, Lima and Other Varieties: Acreage and Production in California  
by Principal Producing Counties, 1939 and 1944

County	Acreage					
	Lima varieties		All varieties except Limas		All dry beans	
	1939	1944	1939	1944	1939	1944
acres						
Alameda	--	--	20	363	20	363
Butte	1,214	225	1,301	1,750	2,515	1,975
Colusa	442	128	722	908	1,164	1,036
Contra Costa	--	--	81	294	81	294
Los Angeles	10,277	13,070	2,706	3,096	12,983	16,166
Madera	--	18	724	1,313	724	1,331
Merced	28	1,430	7,164	3,455	7,192	4,885
Monterey	943	925	39,382	32,532	40,325	33,457
Orange	23,468	27,333	6,588	3,761	30,056	31,094
Riverside	69	12	2,850	1,499	2,919	1,511
Sacramento	210	1,106	3,440	4,471	3,650	5,577
San Bernardino	10	--	3,877	2,062	3,887	2,062
San Diego	11,178	11,102	4,794	2,307	15,972	13,409
San Joaquin	8,620	8,887	14,694	5,735	23,314	14,622
San Luis Obispo	35	80	4,373	5,169	4,408	5,249
San Mateo	--	--	590	458	590	458
Santa Barbara	14,862	21,928	14,988	17,931	29,850	39,859
Santa Cruz	24	8	1,544	620	1,568	628
Solano	100	1,967	781	249	881	2,216
Stanislaus	14,093	21,309	21,208	13,475	35,301	34,784
Sutter	754	10,671	16,250	22,680	17,004	33,351
Ventura	37,181	39,646	8,500	4,837	45,681	44,483
Yolo	40	550	2,263	2,250	2,303	2,800
Yuba	97	155	2,266	2,773	2,363	2,928
All Other	197	218	1,664	1,243	1,861	1,461
Total	123,842	160,768	162,770	135,231	286,612	295,999

(Continued on next page)



Table 8 continued.

County	Production					
	Lima varieties		All varieties except Limas		All dry beans	
	1939	1944	1939	1944	1939	1944
	bags of 100 pounds					
Alameda	--	--	254	3,529	254	3,529
Butte	15,265	2,335	10,664	18,093	25,929	20,428
Colusa	3,700	1,700	11,468	8,620	15,168	10,320
Contra Costa	--	--	698	4,407	698	4,407
Los Angeles	82,227	156,886	25,029	38,961	107,256	195,847
Madera	--	257	5,901	12,619	5,901	12,876
Merced	336	24,509	69,314	37,040	69,650	61,549
Monterey	11,111	17,712	603,479	527,257	614,590	544,969
Orange	316,283	403,736	47,193	26,598	363,476	430,334
Riverside	902	75	29,537	12,224	30,439	12,299
Sacramento	2,780	13,042	35,984	38,053	38,764	51,095
San Bernardino	122	--	31,799	20,608	31,921	20,608
San Diego	73,648	71,684	20,901	11,180	94,549	82,864
San Joaquin	162,400	136,818	151,756	71,841	314,156	208,659
San Luis Obispo	89	240	21,478	49,079	21,567	49,319
San Mateo	--	--	4,316	4,710	4,316	4,710
Santa Barbara	124,869	108,968	102,040	140,301	226,909	249,269
Santa Cruz	103	115	17,653	7,658	17,756	7,773
Solano	370	24,423	6,982	2,656	7,352	27,079
Stanislaus	254,611	415,963	231,899	169,530	486,510	585,493
Sutter	10,893	219,196	210,631	233,121	221,524	452,317
Ventura	484,997	555,789	57,539	27,844	542,536	583,633
Yolo	389	3,474	25,206	19,834	25,595	23,308
Yuba	880	1,563	23,063	25,453	23,943	27,016
All Other	2,621	2,545	10,885	15,493	13,506	18,038
Total	1,548,596	2,161,030	1,755,669	1,526,709	3,304,265	3,687,739

Source of data: U.S. Bureau of the Census. United States Census of Agriculture, 1945. Washington, D.C.  
 Vol. I, Statistics for Counties. Part 33. California. Table II. pp. 46-57,

THE FIRST PART OF THE

THE HISTORY OF THE

THE SECOND PART OF THE

THE THIRD PART OF THE

THE FOURTH PART OF THE

THE FIFTH PART OF THE

THE SIXTH PART OF THE



TABLE 9

Production of Dry Edible Beans<sup>a/</sup>  
in Specified Countries of the World  
1930-1944

Region and country	Average 1930-1934	Average 1935-1939	Average 1940-1944
thousands of bags of 100 pounds each			
Western Hemisphere:			
United States	12,467	14,533	18,225
Brazil	15,855	17,938	18,650
Mexico	2,910	2,579	3,434
Chile	1,746	1,744	1,616
Other <sup>b/</sup>	747	1,158	1,596
Total	33,725	37,952	43,521
Western Europe:			
United Kingdom	2,796	2,173	3,134
France	2,806	3,069	2,097
Italy	3,548	3,535	3,067
Spain	3,468	3,368 <sup>c/</sup>	2,935
Other <sup>d/</sup>	883	737	651
Total	13,501	12,882	11,884
Eastern Europe:			
Hungary	1,448	1,190	1,697
Yugoslavia	2,980	2,714	2,934 <sup>e/</sup>
Rumania	6,280	4,907	3,362
Bulgaria	1,532	1,811	3,609
Other <sup>f/</sup>	1,368	1,808	261
Total	13,608	12,430	11,863
Egypt	7,066	6,521	6,521
Japan	1,933	1,677	--
Other countries <sup>g/</sup>	2,547	2,327	2,308
Total	11,546	10,525	8,829 <sup>h/</sup>
Total listed countries	72,380	73,789	76,097

a/ Excluding garbanzos, soybeans, mung, adzuki, broad or horse beans, and similar classes not commonly used as edible beans in the United States.

b/ Canada, Argentina, Uruguay; Argentina not included 1930-1934; 3-year average 1935-1939; 3-year average for Uruguay 1940-1942 instead of 1940-1944.

c/ 2-year average.

d/ Sweden, Netherlands, Germany, Austria; 4-year averages for Germany and Austria in 1935-1939 period, excluded from 1940-1944 average; Netherlands average 1940-1943 instead of 1940-1944.

e/ Average taken over 1940, 1943, 1944.

f/ Czechoslovakia, Poland, Greece; 4-year averages for Czechoslovakia and Poland in 1935-1939 period, excluded from 1940-1944 average; Greece average 1940-1942 instead of 1940-1944.

g/ Turkey, Algeria, French Morocco, Madagascar, Chosen; averages: Chosen 1 year in 1935-1939 period, Madagascar 2 years in 1930-1934 period; Algeria average 1940-1942 instead of 1940-1944.

h/ Not including Japan or Chosen.

Source of data:

U.S. Department of Agriculture. Agricultural Statistics, 1946, table 376, p. 297.



TABLE 10

Imports of Dry Edible Beans and Garbanzos into the United States<sup>a</sup>, 1926-1948

Calendar year	Mexico		Chile	Japan and China	Continental Europe <sup>b</sup>	Other countries	Total	Assumed white beans <sup>c</sup>	Assumed colored beans <sup>d</sup>
	Dried beans	Garbanzos							
	1	2	3	4	5	6	7	8	9
thousand bags of 100 pounds each, cleaned basis									
1926	9	526	2	206	362	129	1,234		
1927	16	370	50	276	461	90	1,263		
1928	72	516	211	347	587	214	1,947		
1929	32	494	187	395	347	271	1,726		
1930	13	179	144	577	224	246	1,383		
1931	10	106	63	435	32	51	697		
1932	13	124	16	41	15	42	251		
1933	80	135	24	43	8	22	312		
1934	55	100	15	53	5	25	253		
1935	108	75	133	117	5	25	463		
1936	8	78	106	54	39	26	311		
1937	1	86	202	206	121	49	665		
1938	4	61	9	40	19	27	160		
1939	1	68	2	49	4	26	150		
1940	1	57	6	52	--	26	142		
1941	6	96	59	79	--	15	255		
1942	17	219	27	9	--	3	275		
1943	18	1,152	82	--	--	20	1,272		
1944	26	657	9	--	--	8	700		
1945	8	87	213	--	--	39	347		
1946	3	16	71	--	--	136	226		
1947	5	91	224	--	--	43	363		
1948 <sup>e</sup>	3	57	136	--	24	24	244		
Average:									
1926-1930	28.4	417.0	118.8	360.2	396.2	190.0	1,510.6	671.3	839.3
1931-1935	53.2	108.0	50.2	137.8	13.0	33.0	395.2	98.4	296.8
1936-1940	3.0	70.0	65.0	80.2	36.6	30.8	285.6	92.1	193.5
1941-1945	15.0	442.2	78.0	17.6	--	17.0	569.8	17.3	552.5

(Continued on next page)





## Table 10 continued

a/ General imports 1926-1933; imports for consumption 1934-1942; general imports 1943-1946 with imports for consumption negligible.

b/ Includes Germany, Italy, France, Hungary, Belgium, Netherlands, Bulgaria, Czechoslovakia, Greece, Poland and Danzig, Rumania, Spain, and Yugoslavia.

c/ Includes imports from Continental Europe and one-half of imports from Japan, China, and other countries.

d/ Includes imports from Mexico, Chile, and one-half of imports from Japan, China, and other countries.

e/ 11 month average, January-November.

## Sources of data:

1926-1944: U.S. Bureau of Foreign and Domestic Commerce. Foreign Commerce and Navigation of the United States. Washington, D.C., 1946.

1945-1947: U.S. Bureau of the Census. U.S. General Imports of Merchandise. Washington, D.C., Report No. FT-110, annual summaries.

1948: Ibid. Monthly issues January-November.



TABLE 11

Shipments of Dry Edible Beans from Continental United States to Foreign and Overseas Territory<sup>a/</sup>  
(Including Lend-Lease and UNRRA Shipments, Excluding United States Armed Forces), 1931-1948

Year beginning July 1	Puerto Rico	Cuba	Other Central and South America <sup>b/</sup>	Other Western Hemisphere <sup>c/</sup>	United Kingdom	USSR	Europe	All other countries	Total	Assumed white beans	Assumed colored beans
	1	2	3	4	5	6	7	8	9	10	11
	thousand bags of 100 pounds each, cleaned basis										
1931-32	309	32	37	23	0	0	d/	19	420		
1932-33	386	32	34	26	0	0	d/	13	491		
1933-34	296	23	26	27	0	0	d/	13	385		
1934-35	278	12	23	32	0	0	d/	8	353		
1935-36	294	40	27	44	0	0	d/	9	414		
1936-37	308	13	15	21	0	0	d/	4	361		
1937-38	368	36	18	26	0	0	d/	13	461		
1938-39	365	132	57	26	0	0	45	16	641		
1939-40	433	233	43	79	0	0	415	49	1,252		
1940-41	441	270	94	40	217	0	94	35	1,191		
1941-42	309 <sup>e/</sup>	284	47	52 <sup>e/</sup>	1,622	274	44	32	2,664		
1942-43	108 <sup>e/</sup>	101	31	51 <sup>e/</sup>	263	1,792	413	32	2,791		
1943-44	0	119	20	27	609	1,757	86	112	2,730		
1944-45	3	142	15	19	611	1,104	569	52	2,515		
1945-46	332	37	13	49	277	149	311	44	1,212		
1946-47	242	290	23	69	425	0	211	497	1,757		
1947-48	--	496	34	--	20	0	1,733	308	--		
Averages:											
1931-1935	312.6	27.8	29.4	30.4	0	0	d/	12.4	412.6	36.6	376.0
1936-1940	383.0	136.8	45.4	38.4	43.4	0	110.8	23.4	781.2	204.3	576.9
1941-1945	150.4	136.6	25.2	39.6	676.4	1,015.2	284.6	54.4	2,382.4	2,043.0	339.4

a/ Includes dried beans for consumption and for seed, but excludes canned beans. Includes exports and shipment to United States territories and possessions. Assumed that negligible quantities of dry beans are exported from U.S. territories.

b/ Including West Indies and Bermuda.

c/ Includes Canada, Alaska, Hawaii, and Virgin Islands after 1935. Alaska estimated 1940-1944.

d/ Included in "all other countries."

e/ Estimated from total shipments to United States territories from United States Production and Marketing Administration unpublished data.

Sources of data:

Col. 1: Table 13, col. 2. Cols. 2, 3, 5-8: Table 12, cols. 2-7. Col. 4: Canada from table 12, col. 1; Alaska, Hawaii, and Virgin Islands from table 13, cols. 1, 3, and 4. Col. 9: Computed--sum of cols. 1 through 8. Col. 10: Assumed equal to sum of cols. 4, 5, 6, 7, and one-half of col. 8. Col. 11: Assumed equal to sum of cols. 1, 2, 3, and one-half of col. 8.





TABLE 12

United States Exports of Dry Edible Beans, Excluding United States Territories  
(Including Lend-Lease and UNRRA, Excluding United States Armed Forces)  
1931-1948

Year beginning July 1	Canada	Cuba	Other Central and South <sup>a/</sup> America	United Kingdom	USSR	Other Europe	All other exports	Total exports
	1	2	3	4	5	6	7	8
	thousands of bags of 100 pounds each, cleaned basis							
1931-32	7.2	32.4	36.6	b/	b/	b/	18.6	94.8
1932-33	4.8	32.4	33.6	b/	b/	b/	13.2	84.0
1933-34	7.2	23.4	26.4	0	0	6.0	6.6	69.6
1934-35	7.8	12.0	23.4	0	0	2.4	6.0	51.6
1935-36	6.0	40.2	27.0	0	0	2.4	6.6	82.2
1936-37	3.6	12.6	15.0	0	0	1.2	3.0	35.4
1937-38	7.2	36.0	18.0	0	0	6.0	6.6	73.8
1938-39	10.2	132.0	57.0	0	0	45.0	16.2	260.4
1939-40	63.0	233.4	43.2	0	0	414.6	48.6	802.8
1940-41	22.8	270.0	94.2	216.6	0	94.2	35.4	733.2
1941-42	23.4	283.8	47.4	1,621.8	274.2	44.4	31.8	2,326.8
1942-43	37.2	101.4	30.6	263.4	1,791.6	412.8	32.4	2,669.4
1943-44	27.0	118.8	19.8	609.0	1,756.8	85.8	112.2	2,729.4
1944-45	18.6	141.6	15.0	610.8	1,104.0	568.8	51.6	2,510.4
1945-46 <sup>c/</sup>	40.2	37.2	13.1	276.6	149.3	311.6	43.8	871.8
1946-47 <sup>c/</sup>	53.1	290.4	23.3	425.4	0	210.8 <sup>d/</sup>	497.0 <sup>d/</sup>	1,500.0
1947-48 <sup>c/</sup>	21.6	495.5	34.0	19.8	0	1,733.2 <sup>d/</sup>	308.5 <sup>d/</sup>	2,613.3

a/ Including West Indies and Bermuda.

b/ Included in all other exports.

c/ Includes cowpeas and seedbeans.

d/ Beginning 1947 includes United States Army purchases for civilians, including shipments to Japan of 463.6 thousand bags in 1946-47 and 299 thousand in 1947-48.

Sources of data:

1931-1933: U.S. Department of Agriculture. Agricultural Statistics, 1940. Washington, D.C. Table 659, p. 514, converted into bags of 100 pounds from bushels of 60 pounds.

1933-1940: Ibid. 1942, table 695, p. 579, converted.

1940-1945: Ibid. 1946, table 575, p. 490, converted.

1945-1946: U.S. Bureau of the Census. U.S. Exports of Domestic Merchandise. Washington, D.C. Report FT-410, monthly issues.

1946-1948: U.S. Office of Foreign Agricultural Relations. Foreign Agricultural Trade. Washington, D.C. December, 1948. pp. 49-50.

THE FOLLOWING TABLES SHOW THE RESULTS OF THE ANALYSES OF THE SAMPLES OF THE  
WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

Date		Place		Temperature		Direction		Wind		Barometer		Rain		Remarks	
Day	Month	Locality	Depth	Surface	Bottom	Force	Direction	Force	Direction	Force	Direction	Force	Direction	Remarks	Remarks
1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	7	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	7	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	7	9	9	9	9	9	9	9	9	9	9	9	9	9	9
10	7	10	10	10	10	10	10	10	10	10	10	10	10	10	10
11	7	11	11	11	11	11	11	11	11	11	11	11	11	11	11
12	7	12	12	12	12	12	12	12	12	12	12	12	12	12	12
13	7	13	13	13	13	13	13	13	13	13	13	13	13	13	13
14	7	14	14	14	14	14	14	14	14	14	14	14	14	14	14
15	7	15	15	15	15	15	15	15	15	15	15	15	15	15	15
16	7	16	16	16	16	16	16	16	16	16	16	16	16	16	16
17	7	17	17	17	17	17	17	17	17	17	17	17	17	17	17
18	7	18	18	18	18	18	18	18	18	18	18	18	18	18	18
19	7	19	19	19	19	19	19	19	19	19	19	19	19	19	19
20	7	20	20	20	20	20	20	20	20	20	20	20	20	20	20
21	7	21	21	21	21	21	21	21	21	21	21	21	21	21	21
22	7	22	22	22	22	22	22	22	22	22	22	22	22	22	22
23	7	23	23	23	23	23	23	23	23	23	23	23	23	23	23
24	7	24	24	24	24	24	24	24	24	24	24	24	24	24	24
25	7	25	25	25	25	25	25	25	25	25	25	25	25	25	25
26	7	26	26	26	26	26	26	26	26	26	26	26	26	26	26
27	7	27	27	27	27	27	27	27	27	27	27	27	27	27	27
28	7	28	28	28	28	28	28	28	28	28	28	28	28	28	28
29	7	29	29	29	29	29	29	29	29	29	29	29	29	29	29
30	7	30	30	30	30	30	30	30	30	30	30	30	30	30	30

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

ANALYSES OF THE WATER TAKEN AT THE VARIOUS PLACES DURING THE MONTH OF JULY 1900.

TABLE 13

Shipments of Dry Edible Beans<sup>a/</sup> from Continental  
United States to United States Territories

Year beginning July 1	Hawaii	Puerto Rico	Alaska	Virgin Islands	Total
	1	2	3	4	5
	thousands of bags of 100 pounds each, cleaned basis				
1931-32	12	309	4	0	325
1932-33	17	386	4	0	407
1933-34	16	296	4	0	316
1934-35	19	278	5	0	302
1935-36	32	294	3	2	332
1936-37	12	308	4	1	325
1937-38	14	363	4	1	387
1938-39	10	365	5	1	381
1939-40	10	433	b/	2	
1940-41	15	441	0	2	458
1941-42	d/	d/	d/	d/	d/
1942-43	d/	d/	d/	d/	d/
1943-44	d/	d/	d/	d/	d/
1944-45	0	3	0	0	3
1945-46 <sup>c/</sup>	6	532 <sup>c/</sup>	0	2	340
1946-47 <sup>c/</sup>	14	242 <sup>c/</sup>	0	2	258

a/ Includes cowpeas and seedbeans but not garbanzos.

b/ Beans not listed separately from other vegetables.

c/ Exports of seedbeans to Hawaii and Puerto Rico in fiscal years, 1945-46, and 1946-47 only. No exports of seedbeans to Virgin Islands.

d/ Data not available. 1943-44 amounts believed negligible.

Sources of data:

1931-1936: U.S. Bureau of Foreign and Domestic Commerce. Monthly Summary of Foreign Commerce of the United States. Washington, D. C. June issues 1933 to 1937 inclusive.

1937-1941: U.S. Bureau of Agricultural Economics. Foreign Crops and Markets. Washington, D. C. Vol. 37, no. 21, Nov. 23, 1938 Supplement (for 1936-37 and 1937-38); vol. 39, no. 21, Dec. 9, 1939, Supplement (for 1938-39); vol. 45, no. 2, July 13, 1942, Supplement (for 1939-40 and 1940-41).

1943-1947: U.S. Bureau of the Census. United States Trade in Merchandise and Gold and Silver with United States Territories and Possessions. Washington, D. C. Report FT 800. Calendar year summaries, six-month summaries and monthly issues.





TABLE 14

Dry Edible Beans: Balance of Trade of Major Nations  
and Geographical Divisions of the World, 1929-1933

	Average 1929-1933			
	Net exports	Net imports	Net exports	Net imports
	millions of bags of 100 pounds each			
<u>Europe</u>				
<u>Eastern Europe and USSR</u> <sup>a/</sup>	3.8			
Western Europe <sup>b/</sup>		3.3		
United Kingdom <sup>c/</sup>		1.0		
Other Europe		0.4		
Net balance				0.9
<u>Asia</u>				
China	2.3			
Manchuria	1.9			
India	.5			
Other Asia		3.3		
Net balance			1.4	
<u>Western Hemisphere</u>				
U.S.A. and Territories		0.4		
Chile	0.4			
Other		0.6		
Net balance				0.6
<u>Net other countries</u> <sup>d/</sup>			0.3	
Sum of net total			1.7	1.5 <sup>e/</sup>

a/ Eastern Europe includes: Albania, Bulgaria, Hungary, Poland, Danzig, and Yugoslavia.

b/ Includes: Germany, Austria, Belgo Luxemburg Economic Union, Spain, Finland, France, Italy, Malta, Norway, Portugal, Sweden, Switzerland, and Czechoslovakia.

c/ Includes Ireland.

d/ Includes Africa and Oceania.

e/ Figures do not agree because of inaccuracies in data.

Source of data:

International Institute of Agriculture. International Yearbook of Agricultural Statistics, 1939-40. Rome, 1940, table 141, "Dried Kidney Beans," pp. 505-509.



TABLE 15

All Dry Beans: Stocks, Production, Imports, Exports,  
Supply, and Disappearance, 1924-1947

Marketing year beginning September 1	Beginning stocks	Production	Imports (including Garbanzos)	Exports <sup>2</sup> / (including baked beans dry basis)	Domestic supply	Domestic disappearance		
						Total	Used for seed <sup>3</sup> / 7	Apparent consumption 8
1	2	3	4	5	6	7	8	
thousand bags of 100 pounds each, cleaned basis								
1924-25	1,590	8,410	863	736	10,127	9,527	--	--
1925-26	600	10,755	716	623	11,448	10,148	--	--
1926-27	1,300	9,669	796	579	11,186	9,706	--	--
1927-28	1,480	9,103	1,482	517	11,553	10,983	--	--
1928-29	570	9,900	764	454	10,800	10,550	--	--
1929-30	250	11,561	1,874	393	13,292	12,362	1,319	11,043
1930-31	930	13,540	960	425	15,025	12,960	1,238	11,672
1931-32	2,065	11,970	164	430	13,769	12,107	1,074	11,033
1932-33	1,662	10,410	206	503	11,775	10,525	1,195	9,330
1933-34	1,250	12,065	259	419	13,155	11,155	1,262	9,893
1934-35	2,000	10,656	503	345	12,814	11,664	1,314	10,350
1935-36	1,150	13,333	265	465	14,203	13,163	1,254	11,909
1936-37	1,120	10,767	703	374	12,216	11,291	1,301	9,990
1937-38	925	14,940	199	493	15,571	13,121	1,252	11,869
1938-39	2,450	14,717	141	730	16,578	13,428	1,238	12,190
1939-40	3,150	14,254	143	1,331	16,216	12,766	1,348	11,418
1940-41	3,450	15,790	241	2,209	17,272	13,772	1,464	12,308
1941-42	3,500	17,100	164	2,170	18,594	14,021	1,509	12,512
1942-43	4,573	17,568	452	2,976	19,617	16,036	1,822	14,214
1943-44	3,581	19,435	1,510	3,261	21,265	16,955	1,760	15,195
1944-45	4,310	15,060	470	2,764	17,076	16,251	1,460	14,791
1945-46	825	11,954	186	1,205	11,760	11,409	1,401	10,008
1946-47	351	14,737	147	1,176	14,059	13,693	1,518	12,175
1947-48	366	15,726						
Averages:								
1926-1930	906	10,756	1,183	474	12,371	11,312	--	--
1931-1935	1,625	11,687	279	432	13,159	11,723	1,220	10,503
1936-1940	2,219	14,094	285	1,027	15,571	12,876	1,321	11,555
1941-1945	3,358	16,223	556	2,475	17,662	14,935	1,590	13,344

(Continued on next page)





Table 15 continued.

- a/ Includes U.S. Insular Possessions.  
b/ Seed for both dry and green beans.

Sources of data:

Cols. 1, 2, 3, 4, 7:	1924-1928:	Pond, Reed K. <u>Economic Data for Dry Edible Beans 1924-1940 (Revised)</u> . U.S. Surplus Marketing Administration, Washington, D.C., April 1941. Table 1, p.7. Processed.
	1929-1947:	U.S. Production and Marketing Administration. <u>Bean Market Review</u> . Washington, D.C., vol. 19, no. 25, June 24, 1948.
Col. 5:	Computed--col. 1 plus col. 2 plus col. 3 minus col. 4.	
Col. 6:	Computed--col. 5 minus col. 1 next year.	
Col. 8:	Computed--col. 6 minus col. 7.	

10

TABLE 16

Stocks of Dry Edible Beans in California Warehouses, 1924-1948

Year beginning September 1	Small White	Standard Lima	Baby Lima	Black- eye	Pink	Pinto	Red Kidney	Small Red and Cranberry	Other varieties	Total
	1	2	3	4	5	6	7	8	9	10
	thousand bags of 100 pounds each, cleaned basis									
1924	103	22	6	4	217	--	2	25	77	456
1925	16	4	1	4	17	--	4	16	39	101
1926	42	45	9	45	74	--	5	47	27	294
1927	2	167	67	118	63	--	13	18	22	470
1928	9	15	5	44	44	1	8	40	9	175
1929	1	2	1	28	12	0	1	29	2	77
1930	25	16	3	25	5	3	0	10	5	92
1931	87	75	103	207	126	41	15	19	16	689
1932	98	93	148	203	52	12	55	20	22	703
1933	28	47	68	58	27	1	5	8	4	246
1934	142	125	110	173	84	2	10	4	7	657
1935	98	87	116	41	29	9	8	8	17	413
1936	48	63	21	95	255	54	2	35	11	584
1937	40	60	145	120	110	22	6	18	3	524
1938	243	147	303	254	42	3	24	17	16	1,039
1939	235	317	371	151	132	8	38	39	22	1,313
1940	178	235	210	67	73	62	12	45	12	894
1941	164	115	197	263	149	143	2	36	30	1,099
1942	360	99	221	197	156	55	21	37	24	1,170
1943	234	39	36	41	157	58	15	10	28	618
1944	32	5	17	27	28	2	7	5	29	152
1945	30	7	7	3	5	1	6	1	35	95
1946	36	11	16	17	9	1	--	1	16	107
1947	21	--	22	1	7	1	--	1	13	66
1948	24	4	57	21	15	21	4	1	19	166

(Continued on next page)

中華民國二十九年九月一日

行政院秘書長

呈請

查

案

查

查

查

查

查

呈

呈

呈

呈



Table 16 continued.

## Sources of data:

- U.S. Production and Marketing Administration, Bean Market Review. Washington, D.C.  
 1924-1944: Small White, vol. 16, no. 10, March 8, 1945.  
           Standard Lima, vol. 17, no. 7, February 14, 1946.  
           Baby Lima, vol. 16, no. 9, March 1, 1945.  
           Blackeye, vol. 16, no. 5, February 1, 1945.  
           Pink, vol. 16, no. 18, May 3, 1945.  
           Pinto, vol. 16, no. 14, April 5, 1945.  
           Red Kidney, vol. 16, no. 17, April 27, 1945.  
           Small Red, vol. 16, no. 23, June 7, 1945.  
           Cranberry, vol. 16, no. 21, May 24, 1945.  
           Total California, vol. 16, no. 30, July 26, 1945.  
 1945-1946: Vol. 17, no. 38, September 28, 1946; and vol. 18, no. 17, April 24, 1947.  
 1947: Vol. 19, no. 2, January 15, 1948.



## Stocks of Dry Edible Beans in the United States, 1932-1946

Year beginning September 1	Pea and medium white	Great Northern	Pinto	Red Kidney	Small Red and cranberry	Stocks of five main California varieties <sup>a/</sup>	Other varieties	Total
	1	2	3	4	5	6	7	8
	thousand bags of 100 pounds each, cleaned basis <sup>b/</sup>							
1932	200	488	267	65	20 <sup>c/</sup>	594	68	1,622
1933	450	351	72	35	33	228	81	1,250
1934	489	408	100	30	36	628 <sup>d/</sup>	309	2,000
1935	325	265	25	25	31	371	108	1,150
1936	300	95	65	10	104	361 <sup>d/</sup>	185	1,120
1937	125	185	80	20	58	445 <sup>d/</sup>	12	925
1938	750	450	50	65	57	989	89	2,450
1939	750	625	247	148	149	1,167 <sup>d/</sup>	64	3,150
1940	616	750	700	250	368	763	3	3,450
1941	461 <sup>e/</sup>	690 <sup>e/</sup>	1,089 <sup>e/</sup>	13 <sup>e/</sup>	140 <sup>e/</sup>	888 <sup>e/</sup>	219 <sup>e/</sup>	3,500 <sup>e/</sup>
1942	692	668	413	308	150	1,033	146	4,573 <sup>e/</sup>
1943	426	533	330	145	77	507	111	3,581 <sup>e/</sup>
1944	396	385	705	69	52	109	245	4,310 <sup>e/</sup>
1945	105	125	58	69	12	52	183	825 <sup>e/</sup>
1946	36	46	14	34	32	89	79	351 <sup>e/</sup>

<sup>a/</sup> Includes Small Whites, Standard Limas, Baby Limas, Blackeyes, and Pinks.

<sup>b/</sup> Including farm stocks and commercial stocks. 1941-1946 farm stocks converted to cleaned basis by multiplying by the proportion cleaned production ÷ uncleaned production using production in Michigan and New York for Pea and Medium White, production in Idaho for Great Northern, production in New York for Red Kidneys and the five-year average relationship for 1934-1938 from Pond, Reed K., Economic Data for Dry Edible Beans, 1924-1940, for all others.

<sup>c/</sup> No data on Idaho stocks of Small Reds.

<sup>d/</sup> August 1 stocks for Blackeyes for 1934, 1936, 1937, and 1939 used from Pond, Reed K., Economic Data for Dry Edible Beans. Stocks of Standard Limas in 1936 and of Baby Limas in 1939 from same source.

<sup>e/</sup> Includes stocks held by the Federal Surplus Commodities Corporation and Surplus Marketing Administration.

## Sources of data:

1932-1939 (except col. 6): Pond, Reed K. Economic Data for Dry Edible Beans, 1924-1940. U.S. Surplus Marketing Administration, Washington, D.C., April 1941.

Col. 6, table 16, cols. 1-5, except as noted.

1940: U.S. Department of Agriculture. Agricultural Statistics, 1945. Washington, D.C. Table 368, p. 275.

1941-1945: U.S. Department of Agriculture. Agricultural Statistics, 1946. Washington, D.C. Table 379, p. 299.

1946: U.S. Bureau of Agricultural Economics. September Stocks of Dry Edible Beans and Dry Peas. Washington, D.C. September 20, 1946.

Table 1. Summary of the results of the analysis of variance for the different factors.

Source of variation		Degrees of freedom		Mean square		F-value		Probability	
Between groups		Within groups		Total		Error		Grand total	
Factor A	1	10	10	11	11	11	11	11	11
Factor B	2	20	20	22	22	22	22	22	22
Factor C	3	30	30	33	33	33	33	33	33
Factor D	4	40	40	44	44	44	44	44	44
Factor E	5	50	50	55	55	55	55	55	55
Factor F	6	60	60	66	66	66	66	66	66
Factor G	7	70	70	77	77	77	77	77	77
Factor H	8	80	80	88	88	88	88	88	88
Factor I	9	90	90	99	99	99	99	99	99
Factor J	10	100	100	110	110	110	110	110	110
Factor K	11	110	110	121	121	121	121	121	121
Factor L	12	120	120	132	132	132	132	132	132
Factor M	13	130	130	143	143	143	143	143	143
Factor N	14	140	140	154	154	154	154	154	154
Factor O	15	150	150	165	165	165	165	165	165
Factor P	16	160	160	176	176	176	176	176	176
Factor Q	17	170	170	187	187	187	187	187	187
Factor R	18	180	180	198	198	198	198	198	198
Factor S	19	190	190	209	209	209	209	209	209
Factor T	20	200	200	220	220	220	220	220	220
Factor U	21	210	210	231	231	231	231	231	231
Factor V	22	220	220	242	242	242	242	242	242
Factor W	23	230	230	253	253	253	253	253	253
Factor X	24	240	240	264	264	264	264	264	264
Factor Y	25	250	250	275	275	275	275	275	275
Factor Z	26	260	260	286	286	286	286	286	286
Factor AA	27	270	270	297	297	297	297	297	297
Factor AB	28	280	280	308	308	308	308	308	308
Factor AC	29	290	290	319	319	319	319	319	319
Factor AD	30	300	300	330	330	330	330	330	330
Factor AE	31	310	310	341	341	341	341	341	341
Factor AF	32	320	320	352	352	352	352	352	352
Factor AG	33	330	330	363	363	363	363	363	363
Factor AH	34	340	340	374	374	374	374	374	374
Factor AI	35	350	350	385	385	385	385	385	385
Factor AJ	36	360	360	396	396	396	396	396	396
Factor AK	37	370	370	407	407	407	407	407	407
Factor AL	38	380	380	418	418	418	418	418	418
Factor AM	39	390	390	429	429	429	429	429	429
Factor AN	40	400	400	440	440	440	440	440	440
Factor AO	41	410	410	451	451	451	451	451	451
Factor AP	42	420	420	462	462	462	462	462	462
Factor AQ	43	430	430	473	473	473	473	473	473
Factor AR	44	440	440	484	484	484	484	484	484
Factor AS	45	450	450	495	495	495	495	495	495
Factor AT	46	460	460	506	506	506	506	506	506
Factor AU	47	470	470	517	517	517	517	517	517
Factor AV	48	480	480	528	528	528	528	528	528
Factor AW	49	490	490	539	539	539	539	539	539
Factor AX	50	500	500	550	550	550	550	550	550
Factor AY	51	510	510	561	561	561	561	561	561
Factor AZ	52	520	520	572	572	572	572	572	572
Factor BA	53	530	530	583	583	583	583	583	583
Factor BB	54	540	540	594	594	594	594	594	594
Factor BC	55	550	550	605	605	605	605	605	605
Factor BD	56	560	560	616	616	616	616	616	616
Factor BE	57	570	570	627	627	627	627	627	627
Factor BF	58	580	580	638	638	638	638	638	638
Factor BG	59	590	590	649	649	649	649	649	649
Factor BH	60	600	600	660	660	660	660	660	660
Factor BI	61	610	610	671	671	671	671	671	671
Factor BJ	62	620	620	682	682	682	682	682	682
Factor BK	63	630	630	693	693	693	693	693	693
Factor BL	64	640	640	704	704	704	704	704	704
Factor BM	65	650	650	715	715	715	715	715	715
Factor BN	66	660	660	726	726	726	726	726	726
Factor BO	67	670	670	737	737	737	737	737	737
Factor BP	68	680	680	748	748	748	748	748	748
Factor BQ	69	690	690	759	759	759	759	759	759
Factor BR	70	700	700	770	770	770	770	770	770
Factor BS	71	710	710	781	781	781	781	781	781
Factor BT	72	720	720	792	792	792	792	792	792
Factor BU	73	730	730	803	803	803	803	803	803
Factor BV	74	740	740	814	814	814	814	814	814
Factor BW	75	750	750	825	825	825	825	825	825
Factor BX	76	760	760	836	836	836	836	836	836
Factor BY	77	770	770	847	847	847	847	847	847
Factor BZ	78	780	780	858	858	858	858	858	858
Factor CA	79	790	790	869	869	869	869	869	869
Factor CB	80	800	800	880	880	880	880	880	880
Factor CC	81	810	810	891	891	891	891	891	891
Factor CD	82	820	820	902	902	902	902	902	902
Factor CE	83	830	830	913	913	913	913	913	913
Factor CF	84	840	840	924	924	924	924	924	924
Factor CG	85	850	850	935	935	935	935	935	935
Factor CH	86	860	860	946	946	946	946	946	946
Factor CI	87	870	870	957	957	957	957	957	957
Factor CJ	88	880	880	968	968	968	968	968	968
Factor CK	89	890	890	979	979	979	979	979	979
Factor CL	90	900	900	990	990	990	990	990	990
Factor CM	91	910	910	1001	1001	1001	1001	1001	1001
Factor CN	92	920	920	1012	1012	1012	1012	1012	1012
Factor CO	93	930	930	1023	1023	1023	1023	1023	1023
Factor CP	94	940	940	1034	1034	1034	1034	1034	1034
Factor CQ	95	950	950	1045	1045	1045	1045	1045	1045
Factor CR	96	960	960	1056	1056	1056	1056	1056	1056
Factor CS	97	970	970	1067	1067	1067	1067	1067	1067
Factor CT	98	980	980	1078	1078	1078	1078	1078	1078
Factor CU	99	990	990	1089	1089	1089	1089	1089	1089
Factor CV	100	1000	1000	1100	1100	1100	1100	1100	1100

The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups.

The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups. The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups.

The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups.

The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups.

The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups.

The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups.

The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups.

The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups.

The results of the analysis of variance are presented in Table 1. The F-values are compared with the critical values from the F-distribution table to determine the significance of the differences between the groups.



TABLE 18

Dry Beans, Lima Varieties: United States Stocks, Supply,  
and Disappearance, 1924-1948

Crop year beginning September 1	Standard Limas			Baby Limas			Total Limas		
	Beginning stocks <sup>a</sup> / 1	Total supply 2	Disappear- ance <sup>b</sup> / 3	Beginning stocks <sup>a</sup> / 4	Total supply 5	Disappear- ance <sup>b</sup> / 6	Beginning stocks <sup>a</sup> / 7	Total supply 8	Disappear- ance <sup>b</sup> / 9
				thousand bags of 100 pounds each					
1924	22	502	498	6	231	230	28	733	728
1925	4	804	759	1	301	292	5	1,105	1,051
1926	45	1,295	1,128	9	539	522	54	1,884	1,650
1927	167	1,177	1,162	67	377	372	234	1,554	1,534
1928	15	905	902	5	406	405	20	1,311	1,307
1929	3	990	974	1	487	484	4	1,477	1,458
1930	16	1,118	1,043	3	699	596	19	1,817	1,639
1931	75	1,139	1,046	103	766	618	178	1,905	1,664
1932	93	965	918	148	470	402	241	1,435	1,320
1933	47	990	865	68	698	588	115	1,688	1,453
1934	125	1,197	1,110	110	816	702	235	2,015	1,812
1935	87	1,076	1,013	116	652	631	203	1,728	1,644
1936	63	1,182	1,122	21	897	752	84	2,079	1,874
1937	60	1,479	1,332	145	1,287	984	205	2,766	2,316
1938	147	1,542	1,225	303	1,167	796	450	2,709	2,021
1939	317	1,456	1,221	371	1,024	814	688	2,480	2,035
1940	235	1,525	1,410	210	1,046	849	445	2,571	2,259
1941	115	1,441	1,342	197	1,096	875	312	2,537	2,217
1942	99	1,454	1,415	221	1,046	1,010	320	2,500	2,425
1943	39	1,374	1,369	36	1,164	1,147	75	2,538	2,516
1944	5	1,196	1,189	17	1,029	1,022	22	2,225	2,211
1945	7	986	975	7	1,090	1,074	14	2,076	2,049
1946	11	852	852	16	1,175	1,153	27	2,027	2,005
1947	0	919	915	22	1,198	1,176	22	2,139	2,100
1948	4	1,228	--	57	1,146	--	61	2,374	--

(Continued on next page)



Table 13 continued.

Crop year beginning September 1	Standard Limas			Baby Limas			Total Limas		
	Beginning stocks <sup>a</sup> 1	Total supply 2	Disappear- ance <sup>b</sup> / 3	Beginning stocks <sup>a</sup> 4	Total supply 5	Disappear- ance <sup>b</sup> / 6	Beginning stocks <sup>a</sup> 7	Total supply 8	Disappear- ance <sup>b</sup> / 9
thousand bags of 100 pounds each <sup>c</sup>									
Averages:									
1926-1930	49	1,097	1,042	17	512	476	66	1,609	1,513
1931-1935	85	1,073	990	109	681	588	194	1,754	1,579
1936-1940	164	1,437	1,262	210	1,084	839	374	2,521	2,101
1941-1945	53	1,290	1,258	96	1,085	1,026	149	2,375	2,284

a/ In California warehouses.

b/ Includes domestic consumption and use for seed.

c/ Field run basis for production, cleaned basis for stocks.

Sources of data:

Cols. 1, 4: Table 16, columns 2 and 3.

Cols. 2, 5: Production (from table 4, columns 2 and 3) plus beginning stocks.

Cols. 3, 6: Total supply less carryover (beginning stocks for following year).

Col. 7: Column 1 plus column 4.

Col. 8: Column 2 plus column 5.

Col. 9: Column 8 total supply less carryover (beginning stocks for following year).

1. The first part of the book is devoted to a general survey of the history of the subject.

2. The second part is devoted to a detailed study of the various theories of the subject.

3. The third part is devoted to a critical examination of the various theories.

4. The fourth part is devoted to a summary of the results of the study.

5. The fifth part is devoted to a list of references.

1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
1991	1992	1993	1994	1995	1996	1997	1998	1999	2000

Continued on next page



TABLE 19

Dry Beans, Three California Varieties: Stocks, Supply, and Disappearance,  
1924-1948

Crop year beginning September 1	Small whites			Blackeyes			Pinks		
	Beginning stocks 1	Total supply 2	Disappear- ance/ 3	Beginning stocks 4	Total supply 5	Disappear- ance/ 6	Beginning stocks 7	Total supply 8	Disappear- ance/ 9
	thousand bags of 100 pounds each								
1924	103	180	164	4	281	277	217	477	460
1925	16	216	174	4	454	409	17	642	568
1926	42	222	220	45	495	377	74	654	591
1927	2	262	273	116	418	374	63	583	539
1928	9	433	432	44	472	444	44	591	579
1929	1	416	391	28	542	517	12	606	601
1930	25	514	427	25	877	670	5	612	486
1931	87	516	418	207	666	463	126	549	497
1932	98	324	296	203	478	420	52	557	530
1933	28	445	303	58	645	472	27	614	530
1934	142	544	446	173	698	657	84	562	533
1935	98	449	401	41	656	561	29	864	609
1936	48	550	510	95	860	740	255	697	587
1937	40	1,064	821	120	977	723	110	562	520
1938	243	783	548	254	766	615	42	679	547
1939	235	655	477	151	724	657	132	589	516
1940	178	829	665	67	1,221	958	73	948	799
1941	164	1,130	770	263	967	770	149	735	579
1942	360	1,159	925	197	930	889	156	728	571
1943	234	882	850	41	937	910	157	687	659
1944	32	531	501	27	471	468	28	327	322
1945	30	454	418	3	455	438	5	304	295
1946	36	427	406	17	453	452	9	387	380
1947	21	574	571	1	695	670	7	522	514
1948	24	809	--	21	1,194	--	15	644	--
Averages:									
1926-1930	16	373	349	52	561	476	40	609	559
1931-1935	91	456	373	136	629	515	64	629	540
1936-1940	149	776	604	137	910	739	122	695	594
1941-1945	164	831	693	106	752	695	99	556	485

Continued on next page)

1975	1975-1976
1976	1976-1977
1977	1977-1978
1978	1978-1979
1979	1979-1980
1980	1980-1981
1981	1981-1982
1982	1982-1983
1983	1983-1984
1984	1984-1985
1985	1985-1986
1986	1986-1987
1987	1987-1988
1988	1988-1989
1989	1989-1990
1990	1990-1991
1991	1991-1992
1992	1992-1993
1993	1993-1994
1994	1994-1995
1995	1995-1996
1996	1996-1997
1997	1997-1998
1998	1998-1999
1999	1999-2000
2000	2000-2001
2001	2001-2002
2002	2002-2003
2003	2003-2004
2004	2004-2005
2005	2005-2006
2006	2006-2007
2007	2007-2008
2008	2008-2009
2009	2009-2010
2010	2010-2011
2011	2011-2012
2012	2012-2013
2013	2013-2014
2014	2014-2015
2015	2015-2016
2016	2016-2017
2017	2017-2018
2018	2018-2019
2019	2019-2020
2020	2020-2021
2021	2021-2022
2022	2022-2023
2023	2023-2024
2024	2024-2025
2025	2025-2026
2026	2026-2027
2027	2027-2028
2028	2028-2029
2029	2029-2030
2030	2030-2031
2031	2031-2032
2032	2032-2033
2033	2033-2034
2034	2034-2035
2035	2035-2036
2036	2036-2037
2037	2037-2038
2038	2038-2039
2039	2039-2040
2040	2040-2041
2041	2041-2042
2042	2042-2043
2043	2043-2044
2044	2044-2045
2045	2045-2046
2046	2046-2047
2047	2047-2048
2048	2048-2049
2049	2049-2050
2050	2050-2051
2051	2051-2052
2052	2052-2053
2053	2053-2054
2054	2054-2055
2055	2055-2056
2056	2056-2057
2057	2057-2058
2058	2058-2059
2059	2059-2060
2060	2060-2061
2061	2061-2062
2062	2062-2063
2063	2063-2064
2064	2064-2065
2065	2065-2066
2066	2066-2067
2067	2067-2068
2068	2068-2069
2069	2069-2070
2070	2070-2071
2071	2071-2072
2072	2072-2073
2073	2073-2074
2074	2074-2075
2075	2075-2076
2076	2076-2077
2077	2077-2078
2078	2078-2079
2079	2079-2080
2080	2080-2081
2081	2081-2082
2082	2082-2083
2083	2083-2084
2084	2084-2085
2085	2085-2086
2086	2086-2087
2087	2087-2088
2088	2088-2089
2089	2089-2090
2090	2090-2091
2091	2091-2092
2092	2092-2093
2093	2093-2094
2094	2094-2095
2095	2095-2096
2096	2096-2097
2097	2097-2098
2098	2098-2099
2099	2099-2100
2100	2100-2101
2101	2101-2102
2102	2102-2103
2103	2103-2104
2104	2104-2105
2105	2105-2106
2106	2106-2107
2107	2107-2108
2108	2108-2109
2109	2109-2110
2110	2110-2111
2111	2111-2112
2112	2112-2113
2113	2113-2114
2114	2114-2115
2115	2115-2116
2116	2116-2117
2117	2117-2118
2118	2118-2119
2119	2119-2120
2120	2120-2121
2121	2121-2122
2122	2122-2123
2123	2123-2124
2124	2124-2125
2125	2125-2126
2126	2126-2127
2127	2127-2128
2128	2128-2129
2129	2129-2130
2130	2130-2131
2131	2131-2132
2132	2132-2133
2133	2133-2134
2134	2134-2135
2135	2135-2136
2136	2136-2137
2137	2137-2138
2138	2138-2139
2139	2139-2140
2140	2140-2141
2141	2141-2142
2142	2142-2143
2143	2143-2144
2144	2144-2145
2145	2145-2146
2146	2146-2147
2147	2147-2148
2148	2148-2149
2149	2149-2150
2150	2150-2151
2151	2151-2152
2152	2152-2153
2153	2153-2154
2154	2154-2155
2155	2155-2156
2156	2156-2157
2157	2157-2158
2158	2158-2159
2159	2159-2160
2160	2160-2161
2161	2161-2162
2162	2162-2163
2163	2163-2164
2164	2164-2165
2165	2165-2166
2166	2166-2167
2167	2167-2168
2168	2168-2169
2169	2169-2170
2170	2170-2171
2171	2171-2172
2172	2172-2173
2173	2173-2174
2174	2174-2175
2175	2175-2176
2176	2176-2177
2177	2177-2178
2178	2178-2179
2179	2179-2180
2180	2180-2181
2181	2181-2182
2182	2182-2183
2183	2183-2184
2184	2184-2185
2185	2185-2186
2186	2186-2187
2187	2187-2188
2188	2188-2189
2189	2189-2190
2190	2190-2191
2191	2191-2192
2192	2192-2193
2193	2193-2194
2194	2194-2195
2195	2195-2196
2196	2196-2197
2197	2197-2198
2198	2198-2199
2199	2199-2200
2200	2200-2201
2201	2201-2202
2202	2202-2203
2203	2203-2204
2204	2204-2205
2205	2205-2206
2206	2206-2207
2207	2207-2208
2208	2208-2209
2209	2209-2210
2210	2210-2211
2211	2211-2212
2212	2212-2213
2213	2213-2214
2214	2214-2215
2215	2215-2216
2216	2216-2217
2217	2217-2218
2218	2218-2219
2219	2219-2220
2220	2220-2221
2221	2221-2222
2222	2222-2223
2223	2223-2224
2224	2224-2225
2225	2225-2226
2226	2226-2227
2227	2227-2228
2228	2228-2229
2229	2229-2230
2230	2230-2231
2231	2231-2232
2232	2232-2233
2233	2233-2234
2234	2234-2235
2235	2235-2236
2236	2236-2237
2237	2237-2238
2238	2238-2239
2239	2239-2240
2240	2240-2241
2241	2241-2242
2242	2242-2243
2243	2243-2244
2244	2244-2245
2245	2245-2246
2246	2246-2247
2247	2247-2248
2248	2248-2249
2249	2249-2250
2250	2250-2251
2251	2251-2252
2252	2252-2253
2253	2253-2254
2254	2254-2255
2255	2255-2256
2256	2256-2257
2257	2257-2258
2258	2258-2259
2259	2259-2260
2260	2260-2261
2261	2261-2262
2262	2262-2263
2263	2263-2264
2264	2264-2265
2265	2265-2266
2266	2266-2267
2267	2267-2268
2268	2268-2269
2269	2269-2270
2270	2270-2271
2271	2271-2272
2272	2272-2273
2273	2273-2274
2274	2274-2275
2275	2275-2276
2276	2276-2277
2277	2277-2278
2278	2278-2279
2279	2279-2280
2280	2280-2281
2281	2281-2282
2282	2282-2283
2283	2283-2284
2284	2284-2285
2285	2285-2286
2286	2286-2287
2287	2287-2288
2288	2288-2289
2289	2289-2290
2290	2290-2291
2291	2291-2292
2292	2292-2293
2293	2293-2294
2294	2294-2295
2295	2295-2296
2296	2296-2297
2297	2297-2298
2298	2298-2299
2299	2299-2300
2300	2300-2301
2301	2301-2302
2302	2302-2303
2303	2303-2304
2304	2304-2305
2305	2305-2306
2306	2306-2307
2307	2307-2308
2308	2308-2309
2309	2309-2310
2310	2310-2311
2311	2311-2312
2312	2312-2313
2313	2313-2314
2314	2314-2315
2315	2315-2316
2316	2316-2317
2317	2317-2318
2318	2318-2319
2319	2319-2320
2320	2320-2321
2321	2321-2322
2322	2322-2323
2323	2323-2324
2324	2324-2325
2325	2325-2326
2326	2326-2327
2327	2327-2328
2328	2328-2329
2329	2329-2330
2330	2330-2331
2331	2331-2332
2332	2332-2333
2333	2333-2334
2334	2334-2335
2335	2335-2336
2336	2336-2337
2337	2337-2338
2338	2338-2339
2339	2339-2340
2340	2340-2341
2341	2341-2342
2342	2342-2343
2343	2343-2344
2344	2344-2345
2345	2345-2346
2346	2346-2347
2347	2347-2348
2348	2348-2349
2349	2349-2350
2350	2350-2351
2351	2351-2352
2352	2352-2353
2353	2353-2354
2354	2354-2355
2355	2355-2356
2356	2356-2357
2357	2357-2358
2358	2358-2359
2359	2359-2360
2360	2360-2361
2361	2361-2362
2362	2362-2363
2363	2363-2364
2364	2364-2365
2365	2365-2366
2366	2366-2367
2367	2367-2368
2368	2368-2369
2369	2369-2370
2370	2370-2371
2371	2371-2372
2372	2372-2373
2373	2373-2374
2374	2374-2375
2375	2375-2376
2376	2376-2377
2377	2377-2378
2378	2378-2379
2379	2379-2380
2380	2380-2381
2381	2381-2382
2382	2382-2383
2383	2383-2384
2384	2384-2385
2385	2385-2386
2386	2386-2387
2387	2387-2388
2388	2388-2389
2389	2389-2390
2390	2390-2391
2391	2391-2392
2392	2392-2393
2393	2393-2394
2394	2394-2395
2395	2395-2396
2396	2396-2397
2397	2397-2398
2398	2398-2399
2399	2399-2400
2400	2400-2401

Table 19 continued.

a/ Includes domestic consumption, use for seed, and exports.

b/ Field run basis for production, cleaned basis for stocks.

Sources of data:

Cols. 1, 4, and 7: Table 16, cols. 1, 4, 5.

Cols. 2, 5, and 8: Production (from table 4, cols. 1, 4, 5) plus beginning stocks.

Cols. 3, 6, and 9: Total supply less carryover (beginning stocks for following year).

1. The first part of the document is a list of names and addresses of the members of the committee. The names are written in a cursive hand, and the addresses are written in a more formal, printed hand. The list is organized in a table-like format with columns for names and addresses.

2. The second part of the document is a list of names and addresses of the members of the committee. The names are written in a cursive hand, and the addresses are written in a more formal, printed hand. The list is organized in a table-like format with columns for names and addresses.

3. The third part of the document is a list of names and addresses of the members of the committee. The names are written in a cursive hand, and the addresses are written in a more formal, printed hand. The list is organized in a table-like format with columns for names and addresses.

4. The fourth part of the document is a list of names and addresses of the members of the committee. The names are written in a cursive hand, and the addresses are written in a more formal, printed hand. The list is organized in a table-like format with columns for names and addresses.

5. The fifth part of the document is a list of names and addresses of the members of the committee. The names are written in a cursive hand, and the addresses are written in a more formal, printed hand. The list is organized in a table-like format with columns for names and addresses.



TABLE 20

Dry Beans, Principal White Varieties: United States Stocks, Supply, and  
Disappearance, 1932-1946

Crop year beginning Sept. 1	Pea and medium white			Great northrens			All white varieties <sup>a/</sup>		
	Beginning stocks	Total supply <sup>b/</sup>	Disappea- rance <sup>b/</sup>	Beginning stocks	Total supply <sup>b/</sup>	Disappea- rance <sup>b/</sup>	B eginning stocks	Total supply <sup>b/</sup>	Disappea- rance <sup>b/</sup>
	1	2	3	4	5	6	7	8	9
	thousand bags of 100 pounds each <sup>c/</sup>								
1932	200	5,596	5,146	488	1,482	1,131	786	7,566	6,737
1933	450	4,835	4,346	351	1,793	1,385	829	7,286	6,247
1934	489	4,878	4,553	408	1,495	1,230	1,039	7,200	6,512
1935	325	5,025	4,725	265	1,793	1,698	688	7,489	7,046
1936	300	2,964	2,839	95	1,698	1,513	443	5,342	4,992
1937	125	4,395	3,645	185	2,495	2,045	350	8,212	6,769
1938	750	5,467	4,717	450	2,359	1,734	1,443	8,851	7,241
1939	750	5,153	4,537	625	2,329	1,579	1,610	8,381	6,837
1940	616	4,883	4,422	750	2,652	1,962	1,544	8,532	7,217
1941	461	5,796	5,104	690	3,064	2,396	1,315	10,190	8,470
1942	692	5,992	5,566	668	3,771	3,238	1,720	11,154	9,961
1943	426	5,769	5,373	533	4,499	4,114	1,193	11,293	10,480
1944	396	4,619	4,514	385	3,114	2,989	813	8,385	8,125
1945	105	3,137	3,101	125	2,849	2,803	260	6,502	6,384
1946	36	3,994		46	3,748		118	8,268	
Averages:									
1932-1935	366	5,084	4,692	378	1,641	1,361	836	7,385	6,635
1936-1940	508	4,572	4,032	421	2,307	1,767	1,078	7,864	6,611
1941-1945	416	5,063	4,732	480	3,459	3,108	1,060	9,505	8,684

<sup>a/</sup> Including also California small whites (see table 19) and minor varieties. For minor varieties, production assumed to be equal to supply.

<sup>b/</sup> Total supply does not include imports. Disappearance includes domestic consumption, use for seed, and exports.

<sup>c/</sup> Field run basis for production, cleaned basis for stocks.

(Continued on next page.)



Table 20 continued.

## Sources of data:

- Cols. 1 and 4: Table 17, columns 1 and 2.  
Cols. 2 and 5: Production (from table 5, columns 2 and 3) plus beginning stocks.  
Cols. 3 and 6: Total supply less carryover (beginning stocks for following year).  
Col. 7: Table 17, column 1 plus column 2 plus table 16, column 1.  
Col. 8: Production (from table 3, column 1) plus this table, column 7.  
Col. 9: Column 8 less column 7 (following year).





TABLE 21

Dry Beans, Principal Colored Varieties: United States Stocks,  
Supply, and Disappearance, 1932-1946

Crop year beginning September 1	Red kidneys		Pintos			All colored varieties <sup>a/</sup>			
	Beginning stocks 1	Total supply <sup>b/</sup> 2	Disappear- ance <sup>b/</sup> 3	Beginning stocks 4	Total supply <sup>b/</sup> 5	Disappear- ance <sup>b/</sup> 6	Beginning stocks 7	Total supply <sup>b/</sup> 8	Disappear- ance <sup>b/</sup> 9
	thousand bags of 100 pounds each <sup>c/</sup>								
1932	65	532	497	267	1,086	1,014	607	3,110	2,885
1933	35	610	580	72	1,890	1,790	225	4,341	3,918
1934	30	589	564	100	686	661	423	3,268	3,117
1935	25	645	635	25	2,502	2,437	151	5,547	5,018
1936	10	707	687	65	1,915	1,835	529	4,883	4,495
1937	20	859	794	80	1,991	1,941	388	5,072	4,604
1938	65	1,057	909	50	2,389	2,142	468	5,708	4,881
1939	148	1,017	767	247	2,989	2,289	827	6,605	5,147
1940	250	918	905	700	4,328	3,239	1,456	8,534	6,880
1941	13	1,200	892	1,069	4,400	3,987	1,654	8,197	6,973
1942	308	1,190	1,045	413	3,642	3,512	1,224	7,641	6,891
1943	145	815	746	330	4,672	3,967	750	8,020	7,139
1944	69	584	515	705	4,180	4,122	881	6,148	6,001
1945	69	663	629	58	2,245	2,231	147	4,111	4,005
1946	34	1,261		14	2,359		106	4,999	
Averages:									
1932-1935	39	594	569	116	1,541	1,476	352	4,066	3,735
1936-1940	99	912	812	228	2,722	2,289	734	6,160	5,201
1941-1945	121	890	765	519	3,868	3,564	931	6,823	6,202

<sup>a/</sup> Including also Blackeye, Pink (see table 19) and minor varieties. For minor varieties, production assumed equal to supply.

<sup>b/</sup> Total supply does not include imports. Disappearance includes domestic consumption, use for seed, and exports.

<sup>c/</sup> Field-run basis for production, cleaned basis for stocks.

(Continued on next page.)



Table 21 continued.

Sources of data:

- Cols. 1 and 4: Table 17, columns 4 and 3.
- Cols. 2 and 5: Production (from table 5, columns 7 and 5) plus beginning stocks.
- Cols. 3 and 6: Total supply less carryover (beginning stocks for following year).
- Col. 7: Table 17, column 3 plus column 4 plus column 5 plus table 16, column 5 plus column 4.
- Col. 8: Production from table 3, column 3 plus this table, column 7.
- Col. 9: Column 8 less column 7 (following year).





TABLE 22

United States Packs of Canned Dried Edible Beans  
and Green Lima Beans, 1929-1946

Marketing year	All United States canned dried beans					Canned dried Kidney beans	Other canned dried beans	Pack of green Lima beans
	Pack 1	Fack 2	Total dis- appearance	Per cent of disappear- ance used for canning	Baked beans with pork or sauce			
	million cases equivalent 24 No. 2 cans	thousand bags of 100 pounds each, dry weight	3	4	5	6	7	8
							thousands of cases of all sizes	thousand cases equivalent 24 No. 2 cans
1929	--	--	--	--	17,204	a/	4,385	1,501
1930	--	--	--	--	--	--	--	--
1931	--	--	--	--	11,731	a/	4,837	1,744
1932	--	--	--	--	--	--	--	--
1933	--	--	--	--	16,460	--	--	--
1934	22.0	2,248	12,009	18.7	--	--	--	1,319
1935	24.0	2,453	13,628	18.0	17,887	2,449	1,308	1,186
1936	26.8	2,739	11,665	23.5	--	--	--	1,551
1937	26.2	2,678	13,614	19.7	18,352	2,554	1,721	1,512
1938	27.0	2,759	14,158	19.5	--	--	--	1,920
1939	28.1	2,872	14,097	20.4	19,459	3,348	3,023	2,000
1940	30.0	3,066	15,981	19.2	--	--	--	1,992
1941	34.5	3,526	16,191	21.8	--	--	--	2,387
1942	10.5	1,073	19,012	5.6	--	--	--	2,527
1943	15.1	1,543	20,216	7.6	--	--	--	1,879
1944	25.6	2,616	19,015	13.8	--	--	--	1,647
1945	28.6	2,923	12,614	23.2	--	--	--	1,581
1946	38.3	3,914	14,869	26.3	--	--	--	1,747

a/ Included in "other"

(Continued on next page.)



Table 22 continued.

Sources of data:

- Col. 1: From United States Bureau of Foreign and Domestic Commerce. Fruit and Vegetable Canning Industries 1934-1945, Revised. Washington, D.C., 1945. p. 101.
- Col. 2: Column 1 multiplied by 10.22 pounds dry beans per case, a weighted average of two factors for baked beans and other dry beans with weights assumed 70 per cent and 30 per cent respectively. Individual factors obtained from table 23.
- Col. 3: From table 15, column 4 plus column 6.
- Col. 4: Column 2 divided by column 3.
- Cols. 5, 6, 7: 1929, 1937, and 1939 from the United States Bureau of the Census. Sixteenth Census of the United States: 1940--Manufactures, 1939. Washington, D.C., Vol. II, part 1, table 4, pp. 113-114.
- Col. 8: 1931, 1933, and 1935 from the United States Bureau of the Census. Biennial Census of Manufactures, 1935. Washington, D.C., Table 4, p. 84.
- Col. 8: 1929 and 1931 from Census of Manufactures. Other years from National Cannery Association. Canned Food Pack Statistics. Part 1, vegetables issue of 1946 to 1948.





TABLE 23

Conversion Factors Used in Converting From  
Cases of Canned Dried Beans to Pounds of  
Dry Edible Beans

Designation	Pounds dry weight per pound net canned weight	Pounds canned weight per case equivalent 24 No. 2 cans	Pounds dry weight per case equivalent 24 No. 2 cans
Baked beans with pork or sauce	.310	31.5	9.77
Other canned dried beans	.376	30.0	11.28
All canned dried beans			10.22

## Sources of data:

- Col. 1: U.S. War Food Administration. Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products (revised). Washington, D.C., 1944, p. 38.
- Col. 2: Ibid, p. 58.
- Col. 3: Weighted average of baked beans and other beans with baked beans weighted by .7 and other beans weighted by .3.

# Table 1

Summary of the results of the experiments conducted on the effect of the concentration of the solution on the rate of reaction.

Concentration of solution (M)	Time taken for reaction to complete (s)	Rate of reaction (1/s)	Observations
0.1	120	0.0083	Reaction was slow
0.2	60	0.0167	Reaction was faster
0.3	40	0.0250	Reaction was very fast

From the above table, it can be seen that the rate of reaction increases as the concentration of the solution increases. This is because there are more particles of the reactants in a given volume, which increases the chance of collision between them. The rate of reaction is directly proportional to the concentration of the solution.

TABLE 24

Dry Beans, California Varieties: Estimated  
Percentage of Production Sold to Cannery,<sup>a/</sup> 1936-1947

Variety	Crop years			
	Average 1936-1940	Average 1941-1945	1946	1947
	per cent			
Small white	40-50	50-60	65-70	70-80
Baby lima	5-10	5-10	15-20 <sup>b/</sup>	5-10
Standard lima	4-6	1-3	4-6	5-7
Pinks	3-5			
Other varieties	0-3			
All varieties	10-15			

<sup>a/</sup> Includes estimated sales both of marketing associations and independent dealers.

<sup>b/</sup> Includes some beans not actually used by canners.

Source of data:

Averages of from two to five estimates by dealers handling in aggregate an estimated two-thirds of California production. High and low figures represent author's appraisal of the range in which the true percentages lie after allowing for inaccuracies and lack of data.





TABLE 25

Dry Beans, Three Main Variety Groups: Estimated Utilization  
in the United States, Average 1936-1940

Main variety group	Total dis- appearance	Net exports	Use for seed	Domestic consumption		
				Total	Canned	Dry
	1	2	3	4	5	6
		thousand bags dry weight, cleaned basis				
White	6,177	112	622	5,443	2,143	3,300
Colored	4,854	383	459	4,012	573	3,439
Lima	1,983	0	203	1,780	107	1,673
All beans <sup>a/</sup>	13,014	495	1,284	11,235	2,823	8,412
		per cent of total disappearance				
White	100	2	10	88	35	53
Colored	100	8	10	82	12	70
Lima	100	0	10	90	5	85
All beans <sup>a/</sup>	100	4	10	86	22	64

<sup>a/</sup> Excluding "other varieties," totalling approximately 600,000 bags, whose disposition is not known.

Sources of data:

The above figures are rough estimates based on several assumptions.

Col. 1: From table 3, columns 1, 3, and 5 multiplied by cleanout ratio, less stock increase from tables 18, 20, and 21, column 7.

Col. 2: White beans: Assumed exports from table 11, column 10 less assumed imports from table 10, column 8.

Colored beans: Assumed exports from table 11, column 11 less assumed imports from table 10, column 9. Foreign trade in lima beans is negligible.

Col. 3: Use for seed assumed to be 10.26 per cent of column 1 minus column 2--relationship obtained from table 15, columns 6 and 7.

Col. 4: Computed--column 1 minus column 2 minus column 3.

Col. 5: All beans from table 22, column 2, average 1936-1940; white beans: table 22, column 1 average 1936-1940 multiplied by .794 (from baked beans percentage of total actual cases) multiplied by conversion factor 9.77 (from table 23); lima beans: 6 per cent of column 4 (see table 24); colored beans: computed from all beans less white less lima.

Col. 6: Computed--column 4 minus column 5.

1890	2712	
1891	2712	
1892	2712	
1893	2712	
1894	2712	
1895	2712	
1896	2712	
1897	2712	
1898	2712	
1899	2712	
1900	2712	

TABLE 26

All Dry Beans and Main Variety Groups: Estimated Annual  
Per-Capita Consumption by Average Periods, 1909-1945

Average period	White varieties	Colored varieties	Lima varieties	All dry Beans <sup>a/</sup>
	1	2	3	4
	pounds per-capita dry weight			
1909-1915	--	--	--	6.2
1916-1920	--	--	--	6.4
1921-1925	3.3	2.1	0.9	6.6
1926-1930	4.3	3.2	1.0	8.5
1931-1935	4.4	2.5	1.1	8.6
1936-1940	4.2	3.1	1.4	9.2
1941-1945	4.0	4.2	1.5	10.3

a/ Does not equal sum of first three columns because of other non-specified varieties and differences in methods of estimation.

Source of data:

Cols. 1, 2, 3: Production from table 3, adjusted for foreign trade, change in stocks and use for seed when data was available. Adjustment similar to that in table 15.

Col. 4: Fox, Karl A. and Marion Clawson. Long-Term Outlook for Dry Edible Beans in the West. United States Bureau of Agricultural Economics, Berkeley, 1945 (unpublished). Table 16.





TABLE 27

Dry Beans and Canned Dry Beans: Estimated Annual Consumption  
by Geographic Region, Average 1936-1940

Region <sup>a/</sup>	Per cent of United States consumed			Total consumption			Per-capita consumption		
	Consumed dry	Consumed canned	Total	Consumed dry	Consumed canned	Total	Consumed dry	Consumed canned	Total
	1	2	3	1	2	3	1	2	3
	per cent			thousand bags dry weight			pounds dry weight		
				White varieties					
Northeast	50.1	52.0	50.8	1,653	1,114	2,767	2.7	1.8	4.5
South	31.7	22.9	28.3	1,046	491	1,537	2.6	1.2	3.8
WNC-Mountain	14.2	17.2	15.4	469	369	838	2.7	2.1	4.8
Pacific	4.0	7.9	5.5	132	169	301	1.4	1.8	3.2
United States	100.0	100.0	100.0	3,300	2,143	5,443	2.5	1.7	4.2
				Colored varieties					
Northeast	16.2	67.7	23.6	557	388	945	0.9	0.6	1.5
South	66.1	11.5	58.3	2,273	66	2,339	5.5	0.2	5.7
WNC-Mountain	8.7	13.8	9.4	299	79	378	1.7	0.5	2.2
Pacific	9.0	7.0	8.7	310	40	350	3.3	0.4	3.7
United States	100.0	100.0	100.0	3,439	573	4,012	2.7	0.4	3.1
				Lima varieties					
Northeast	38.1	41.5	38.3	638	44	682	1.0	0.1	1.1
South	45.2	26.0	44.0	756	28	784	1.8	0.1	1.9
WNC-Mountain	11.6	18.0	12.0	194	19	213	1.1	0.1	1.2
Pacific	5.1	14.5	5.7	85	16	101	0.9	0.2	1.1
United States	100.0	100.0	100.0	1,673	107	1,780	1.3	0.1	1.4
				All dry beans <sup>b/</sup>					
Northeast	33.9	54.8	39.1	2,848	1,546	4,394	4.6	2.5	7.1
South	48.4	20.7	41.5	4,075	585	4,660	9.9	1.5	11.4
WNC-Mountain	11.4	16.5	12.7	962	467	1,429	5.5	2.7	8.2
Pacific	6.3	8.0	6.7	527	225	752	5.6	2.4	8.0
United States	100.0	100.0	100.0	8,412	2,823	11,235	6.5	2.2	8.7

(continued on next page)



Table 27 continued.

a/ For states included in each region, see table 28.

b/ Excluding a small amount of "other" unspecified varieties.

Sources of data:

The above figures are rough estimates based on several assumptions.

Col. 1: Table 28. Based on a sample of wholesale grocers taken in 1939 reporting approximately 33 per cent of total supply.

Col. 2: Bain, H.M. op. cit. (see table 28), table 6, pork and beans for white varieties, red kidney beans for colored varieties. Based on same sample data as column 1.

Other columns: Computed. United States total consumption from table 25, columns 4, 5, and 6. Per-capita consumption computed by dividing by average population 1936-1940 from 16th census of the United States.

All dry beans: Computed from separate variety figures.





TABLE 28

Beans Marketed Dry, Principal Varieties: Percentage Distribution of Each Variety  
Among Geographic Regions<sup>a</sup>, 1939-1940

Variety	Northeast			South			West North Central and Mountain			Pacific	United States
	1	2	3	Total	5	6	7	Total	8	Total	9
per cent											
<u>White</u>											
Pec and medium	5.3	24.4	20.4	50.1	11.1	10.7	9.9	31.7	12.3	1.9	4.0
Great northern	6.5	32.9	28.8	68.2	14.4	6.0	2.7	23.1	7.9	0.1	0.7
Small white	0.5	2.9	11.9	15.3	9.4	23.2	20.5	53.1	24.7	4.9	2.0
Other white	20.5	1.5	1.9	23.9	1.5	0.2	27.5	29.2	3.0	3.5	40.4
	1.9	79.4	11.8	93.1	3.0	1.9	0.5	5.4	1.1	0	0.4
<u>Colored</u>											
Pinto	2.6	6.5	7.1	16.2	21.2	16.2	28.7	65.1	4.3	4.4	9.0
Red kidney	0.3	1.5	4.1	5.9	17.4	19.4	45.1	81.9	5.5	5.0	1.7
Pink	11.0	27.7	23.8	62.5	7.8	3.3	14.7	25.8	5.1	1.3	5.3
Blackeye	0	0.1	1.0	1.1	2.7	0.2	6.1	9.0	1.4	5.5	83.0
Other colored <sup>b</sup>	0.8	8.6	5.1	14.5	31.1	15.1	33.7	79.9	2.3	0.8	2.5
	5.7	7.4	9.5	22.6	31.9	20.8	2.8	55.5	3.8	7.4	10.7
<u>Lima</u>											
Standard lima	2.1	23.8	12.2	38.1	20.5	6.7	18.0	45.2	8.3	3.3	5.1
Baby lima	2.4	31.7	14.5	48.6	16.0	4.1	13.1	33.2	9.2	3.8	5.2
	1.7	10.8	8.4	20.9	27.9	10.9	26.2	65.0	6.6	2.6	4.9
<u>All varieties</u>	3.7	17.6	13.8	35.1	16.7	12.0	18.5	47.2	8.5	3.1	6.1

<sup>a</sup>/ Regions indicated by number include states as follows: 1-Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut; 2-New York, New Jersey, Pennsylvania, Delaware; 3-Ohio, Indiana, Illinois, Michigan, Wisconsin; 4-Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas; 5-Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida; 6-Kentucky, Tennessee, Alabama, Mississippi; 7-Arkansas, Louisiana, Oklahoma, Texas; 8-Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada; 9-Washington, Oregon, California.

<sup>b</sup>/ Includes other red varieties, Yelloweye, and a small amount of unspecified varieties.

Source of data: Bain, H. M. Wholesale Distribution of Dry Beans and Canned Dry Beans During the Year Ended June 30, 1940. U.S. Farm Credit Administration. Miscellaneous Report No. 49. Washington, D.C., 1942. Processed.

Table 11. Based on a sample of wholesale grocers reporting approximately 33 per cent of the 1939 supply.

*Journal of Management Studies*, 19(1), 67-80.

TABLE 29

Beans Marketed Dry, Principal Varieties: Percentage Distribution of Each Variety  
Among Geographic Regions<sup>a</sup>, 1930-1931

Variety	Northeast			South				West North Central and Mountain			Pacific		United States
	1	2	3	Total	5	6	7	Total	4	8	Total	9	
	per cent												
White	5.5	13.9	24.0	43.4	9.8	10.7	10.1	30.6	20.1	1.5	21.6	4.4	100.0
Pea and medium	7.1	17.4	39.1	63.6	11.6	5.9	4.5	22.0	14.1	0.2	14.3	0.1	100.0
Great northern	0	9.0	17.2	26.2	10.2	17.1	13.9	41.2	29.4	2.4	31.8	0.8	100.0
Small white	27.8	0.5	0	28.3	4.3	1.1	16.0	21.4	4.8	2.7	7.5	42.8	100.0
Other white	10.5	57.9	10.5	78.9	0	0	7.9	7.9	0.9	1.8	2.7	10.5	100.0
Colored	2.4	4.3	7.5	14.2	17.1	17.2	31.5	65.8	8.5	5.0	13.5	6.5	100.0
Pinto	0	0	6.0	6.0	15.7	22.5	40.3	78.5	11.1	4.3	15.4	0.1	100.0
Red kidney	21.0	30.5	20.0	71.5	2.1	2.1	21.1	25.3	1.1	0	1.1	2.1	100.0
Pink	0	0.6	5.0	5.6	3.1	0.6	8.8	12.5	7.5	18.8	26.3	55.6	100.0
Blackeye	0.3	5.3	7.1	12.7	30.0	18.3	34.7	83.0	3.1	0.3	3.4	0.9	100.0
Other colored <sup>b/</sup>	10.6	16.2	12.5	39.3	21.1	5.6	4.3	31.0	5.3	7.6	12.9	16.8	100.0
Lima	1.2	21.8	17.3	40.3	19.0	6.7	17.4	43.1	8.9	2.4	11.3	5.3	100.0
Standard lima	1.6	31.2	23.7	56.5	11.0	4.1	8.6	23.7	10.0	3.3	13.3	6.5	100.0
Baby lima	0.3	6.2	6.6	13.1	32.4	11.0	32.4	75.8	6.9	1.1	8.0	3.1	100.0
All varieties	3.6	11.0	16.1	30.7	14.2	12.8	20.2	47.2	13.6	3.1	16.7	5.4	100.0

<sup>a</sup>/ Regions indicated by number include states as follows: 1-Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut; 2-New York, New Jersey, Pennsylvania, Delaware; 3-Ohio, Indiana, Illinois, Michigan, Wisconsin; 4-Minnesota, Iowa, Missouri, North Dakota, Nebraska, Kansas; 5-Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida; 6-Kentucky, Tennessee, Alabama, Mississippi; 7-Arkansas, Louisiana, Oklahoma, Texas; 8-Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada; 9-Washington, Oregon, California.

<sup>b</sup>/ Includes Small Red, Cranberry, Yelloweye, and Bayo.

Source of data: Barr, J.E. and J.A. Thompson. Distribution of Beans by Commercial Classes as Reported by Wholesale Grocers. Washington, D.C.: U.S. Bureau of Agricultural Economics, 1932. Processed. Based on a sample of wholesale processors reporting approximately 50 per cent of the 1930-1931 supply.



1	1000	1000	1000
2	1000	1000	1000
3	1000	1000	1000
4	1000	1000	1000
5	1000	1000	1000
6	1000	1000	1000
7	1000	1000	1000
8	1000	1000	1000
9	1000	1000	1000
10	1000	1000	1000
11	1000	1000	1000
12	1000	1000	1000
13	1000	1000	1000
14	1000	1000	1000
15	1000	1000	1000
16	1000	1000	1000
17	1000	1000	1000
18	1000	1000	1000
19	1000	1000	1000
20	1000	1000	1000
21	1000	1000	1000
22	1000	1000	1000
23	1000	1000	1000
24	1000	1000	1000
25	1000	1000	1000
26	1000	1000	1000
27	1000	1000	1000
28	1000	1000	1000
29	1000	1000	1000
30	1000	1000	1000
31	1000	1000	1000
32	1000	1000	1000
33	1000	1000	1000
34	1000	1000	1000
35	1000	1000	1000
36	1000	1000	1000
37	1000	1000	1000
38	1000	1000	1000
39	1000	1000	1000
40	1000	1000	1000
41	1000	1000	1000
42	1000	1000	1000
43	1000	1000	1000
44	1000	1000	1000
45	1000	1000	1000
46	1000	1000	1000
47	1000	1000	1000
48	1000	1000	1000
49	1000	1000	1000
50	1000	1000	1000
51	1000	1000	1000
52	1000	1000	1000
53	1000	1000	1000
54	1000	1000	1000
55	1000	1000	1000
56	1000	1000	1000
57	1000	1000	1000
58	1000	1000	1000
59	1000	1000	1000
60	1000	1000	1000
61	1000	1000	1000
62	1000	1000	1000
63	1000	1000	1000
64	1000	1000	1000
65	1000	1000	1000
66	1000	1000	1000
67	1000	1000	1000
68	1000	1000	1000
69	1000	1000	1000
70	1000	1000	1000
71	1000	1000	1000
72	1000	1000	1000
73	1000	1000	1000
74	1000	1000	1000
75	1000	1000	1000
76	1000	1000	1000
77	1000	1000	1000
78	1000	1000	1000
79	1000	1000	1000
80	1000	1000	1000
81	1000	1000	1000
82	1000	1000	1000
83	1000	1000	1000
84	1000	1000	1000
85	1000	1000	1000
86	1000	1000	1000
87	1000	1000	1000
88	1000	1000	1000
89	1000	1000	1000
90	1000	1000	1000
91	1000	1000	1000
92	1000	1000	1000
93	1000	1000	1000
94	1000	1000	1000
95	1000	1000	1000
96	1000	1000	1000
97	1000	1000	1000
98	1000	1000	1000
99	1000	1000	1000
100	1000	1000	1000



TABLE 30

Beans Marketed Dry, Principal Varieties: Percentage Distribution of Varieties Within Each of Four Geographic Regions<sup>a</sup>, 1930-1931 and 1939-1940

Variety	1930-1931					1939-1940			
	North-east	South	West North Central and Mountain	Pacific	United States	North-east	South	West North Central and Mountain	Pacific United States
<u>White</u>									
Fea and medium	61.5	28.2	56.3	35.3	43.5	61.4	28.9	52.5	28.4
Great northern	34.8	7.6	14.4	0.3	16.8	45.5	11.4	34.2	2.8
Small white	17.9	18.4	40.0	3.1	21.0	5.8	15.2	16.2	4.4
Other white	3.3	1.8	1.6	27.7	3.5	2.2	2.0	1.8	21.0
	5.5	0.4	0.3	4.2	2.2	7.9	0.3	0.3	2.2
<u>Colored</u>									
Finto	19.4	58.5	33.8	50.5	41.9	17.2	52.2	27.8	55.2
Red kidney	5.0	42.3	23.4	0.3	25.4	2.8	28.8	15.0	4.6
Pink	4.1	1.0	0.1	0.7	1.8	6.4	1.9	2.0	3.1
Blackeye	0.5	0.8	4.7	30.8	3.0	0.1	0.4	1.3	30.7
Other colored <sup>b</sup>	2.5	10.6	1.2	1.0	6.0	2.8	11.7	1.8	2.9
	7.3	3.8	4.4	17.7	5.7	5.1	9.4	7.7	13.9
<u>Lima</u>									
Standard lima	19.1	13.3	9.9	14.2	14.6	21.4	18.9	19.7	16.4
Baby lima	16.8	4.6	7.3	11.1	9.2	16.9	8.6	13.8	10.4
	2.3	8.7	2.6	3.1	5.4	4.5	10.3	5.9	6.0
<u>All varieties</u>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup>/ For states included in each region, see table 28.

<sup>b</sup>/ Includes other red varieties, yelloweye, and a small amount of unspecified varieties.

Sources of data:

For 1930-1931:

Barr, J.E. and J.A. Thompson, Distribution of Beans by Commercial Classes as Reported by Wholesale Grocers. Washington, D.C.: U.S. Bureau of Agricultural Economics, 1932. Processed. Based on a sample of wholesale grocers reporting approximately 50 per cent of the 1930-1931 supply.

For 1939-1940:

Bain, H.M. Wholesale Distribution of Dry Beans and Canned Dry Beans During the Year Ended June 30, 1940. Washington, D.C. U.S. Farm Credit Administration, Miscellaneous Report No. 49, 1942. Processed. Table 11. Based on a sample of wholesale grocers reporting approximately 33 per cent of the 1939-1940 supply.

1	500	200000	40000	1
2	500	200000	40000	1
3	500	200000	40000	1
4	500	200000	40000	1
5	500	200000	40000	1
6	500	200000	40000	1
7	500	200000	40000	1
8	500	200000	40000	1
9	500	200000	40000	1
10	500	200000	40000	1
11	500	200000	40000	1
12	500	200000	40000	1
13	500	200000	40000	1
14	500	200000	40000	1
15	500	200000	40000	1
16	500	200000	40000	1
17	500	200000	40000	1
18	500	200000	40000	1
19	500	200000	40000	1
20	500	200000	40000	1
21	500	200000	40000	1
22	500	200000	40000	1
23	500	200000	40000	1
24	500	200000	40000	1
25	500	200000	40000	1
26	500	200000	40000	1
27	500	200000	40000	1
28	500	200000	40000	1
29	500	200000	40000	1
30	500	200000	40000	1
31	500	200000	40000	1
32	500	200000	40000	1
33	500	200000	40000	1
34	500	200000	40000	1
35	500	200000	40000	1
36	500	200000	40000	1
37	500	200000	40000	1
38	500	200000	40000	1
39	500	200000	40000	1
40	500	200000	40000	1
41	500	200000	40000	1
42	500	200000	40000	1
43	500	200000	40000	1
44	500	200000	40000	1
45	500	200000	40000	1
46	500	200000	40000	1
47	500	200000	40000	1
48	500	200000	40000	1
49	500	200000	40000	1
50	500	200000	40000	1
51	500	200000	40000	1
52	500	200000	40000	1
53	500	200000	40000	1
54	500	200000	40000	1
55	500	200000	40000	1
56	500	200000	40000	1
57	500	200000	40000	1
58	500	200000	40000	1
59	500	200000	40000	1
60	500	200000	40000	1
61	500	200000	40000	1
62	500	200000	40000	1
63	500	200000	40000	1
64	500	200000	40000	1
65	500	200000	40000	1
66	500	200000	40000	1
67	500	200000	40000	1
68	500	200000	40000	1
69	500	200000	40000	1
70	500	200000	40000	1
71	500	200000	40000	1
72	500	200000	40000	1
73	500	200000	40000	1
74	500	200000	40000	1
75	500	200000	40000	1
76	500	200000	40000	1
77	500	200000	40000	1
78	500	200000	40000	1
79	500	200000	40000	1
80	500	200000	40000	1
81	500	200000	40000	1
82	500	200000	40000	1
83	500	200000	40000	1
84	500	200000	40000	1
85	500	200000	40000	1
86	500	200000	40000	1
87	500	200000	40000	1
88	500	200000	40000	1
89	500	200000	40000	1
90	500	200000	40000	1
91	500	200000	40000	1
92	500	200000	40000	1
93	500	200000	40000	1
94	500	200000	40000	1
95	500	200000	40000	1
96	500	200000	40000	1
97	500	200000	40000	1
98	500	200000	40000	1
99	500	200000	40000	1
100	500	200000	40000	1

TABLE 31

Annual Adjusted Income:<sup>a</sup>/Distribution by Income Level in Five Region<sup>b</sup>/-Urban<sup>c</sup>/-Color<sup>d</sup>/  
Groups of the United States, 1935-1936

Family income level, dollars per year <sup>a</sup>	Income per capita					Number of persons						
	North & West, urban	North & West, rural	South, White, urban	South, White, rural	South, Negro	United States	North & West, urban	North & West, rural	South, White, urban	South, White, rural	South, Negro	United States
	1	2	3	4	5	6	7	8	9	10	11	12
	dollars per year						millions of persons <sup>e</sup>					
Under 500	112	101	131	121	109	113	6.9	2.2	1.6	2.9	4.4	18.0
500-1,000	263	220	273	226	220	246	17.6	6.2	3.0	6.3	3.9	37.0
1,000-1,500	388	328	409	347	359	371	16.5	5.9	2.4	3.9	1.0	29.7
1,500-2,000	527	450	546	465	490	505	10.0	3.7	1.8	2.0	0.3	17.8
2,000-3,000	693	601	716	629	659	672	9.0	2.8	2.1	1.7	0.1	15.7
3,000-5,000	993	910	1,032	944	978	982	3.7	1.0	1.2	0.8	0.0	6.7
5,000-over	3,726	3,482	2,718	2,610	2,668	3,466	2.2	0.5	0.4	0.4	0.0	3.5
All levels	536	426	546	389	202	470	65.9	22.3	12.5	18.0	9.7	128.4
	Per cent of total persons						Per cent of total income					
Family income level, dollars per year <sup>a</sup>	North & West, urban	North & West, rural	South, White, urban	South, White, rural	South, Negro	United States	North & West, urban	North & West, rural	South, White, urban	South, White, rural	South, Negro	United States
	13	14	15	16	17	18	19	20	21	22	23	24
	per cent						per cent					
Under 500	10.5	10.1	12.7	16.0	45.6	14.4	2.2	2.4	3.1	5.0	24.7	3.5
500-1,000	26.6	27.8	24.1	35.3	39.8	28.3	13.1	14.4	12.1	20.5	43.4	14.8
1,000-1,500	25.1	26.7	19.3	21.5	9.9	22.9	18.2	20.5	14.5	19.2	17.6	18.0
1,500-2,000	15.2	16.4	14.6	11.1	2.9	13.9	14.9	17.3	14.6	13.3	7.1	15.0
2,000-3,000	13.6	12.5	16.4	9.4	1.5	12.5	17.6	17.6	21.5	15.2	4.9	17.9
3,000-5,000	5.6	4.2	9.7	4.5	0.2	5.4	10.4	9.0	18.3	10.9	1.0	11.2
5,000-over	3.4	2.3	3.2	2.2	0.1	2.6	23.6	18.8	15.9	15.9	1.3	19.6
All levels	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lowest 25%	25	25	25	25	25	25	8	9	9	9	10	8
Second 25%	25	25	25	25	25	25	16	16	16	15	18	16
Third 25%	25	25	25	25	25	25	22	23	24	23	26	22
Highest 25%	25	25	25	25	25	25	54	52	51	53	46	54

(Continued on next page)







Table 31 continued.

a/ Income includes money income and estimated money value of non-money income, such as rent on owned homes and food grown and consumed on farms.

b/ Regions defined as follows: North and West--all United States except South; South--states south of Mason-Dixon line and Ohio River and Louisiana, Arkansas, Oklahoma and Texas (includes regions 5, 6 and 7 of table 28).

c/ Urban includes all incorporated places over 2,500 and entire areas of metropolitan districts defined by U.S. Census Bureau; Rural includes all other areas.

d/ White includes a relatively small number of non-white races other than Negro.

e/ Figures rounded to nearest decimal consistent with rounded totals.

Sources of data:

Cols. 1-5: U.S. National Resources Planning Board. Family Expenditures in the United States. Washington, 1941. Figures for non-relief families in various tables adjusted for family size and fitted to column 6.

Col. 6: U.S. National Resources Committee. Consumer Incomes in the United States. Washington, 1938. Table 2 (page 6) and table 15, column 1 (page 30); U.S. National Resources Planning Board, op. cit. Table 18, column 1. Per-capita income at each income level computed by dividing aggregate income by number of persons in families and single.

Cols. 7-12: Population in all income levels from U.S. Bureau of the Census. 16th Census of the United States (1940)--Population, and 15th Census of the United States (1930)--Population, adjusted for inclusion of metropolitan districts in urban and interpolated for 1936. Distribution by income level from U.S. National Resources Committee, op. cit. Figures for non-relief families in various tables adjusted for family size and to include relief families and single individuals.

Cols. 13-24: Computed from previous columns. Twenty-five per cent points obtained by graphic estimation from Lorenz curves plotted from percentage data above.



TABLE 32

Dry Navy Beans and Canned Baked Beans<sup>a</sup>: Consumption by Income Level in Five Region<sup>b</sup>-Urban<sup>c</sup>-Color<sup>d</sup> Groups in the United States, 1935-1936

Family income level--dollars per year <sup>e</sup>	Consumption per capita											
	Dry navy beans						Canned baked beans					
	North & West, urban	North & West, rural	South, White, urban	South, White, rural	South, Negro, rural	United States	North & West, urban	North & West, rural	South, White, urban	South, White, rural	South, Negro, rural	United States
	1	2	3	4	5	6	7	8	9	10	11	12
	pounds per year dry weight						pounds per year dry weight					
Under 500	6.10	7.35	2.70	--	1.40	4.25	1.74	1.45	1.22	0.24	0.40	1.09
500-1,000	4.65	6.15	2.15	--	1.50	3.94	1.83	1.67	1.44	0.29	0.42	1.36
1,000-1,500	3.95	5.55	1.75	--	1.55	3.72	1.88	1.74	1.76	0.33	0.48	1.59
1,500-2,000	3.25	4.95	1.50	--	1.65	3.20	1.87	1.75	1.76	0.35	0.54	1.64
2,000-3,000	2.60	4.35	1.20	--	1.75	2.57	1.76	1.72	1.44	0.37	0.67	1.55
3,000-5,000	1.75	3.50	0.85	--	1.90	1.74	1.42	1.49	1.00	0.38	1.02	1.23
5,000-over	1.00	1.50	0.40	--	1.50	0.93	0.70	1.05	0.35	0.16	1.50	0.57
All levels	3.85	5.46	1.71	--	1.47	3.47	1.77	1.64	1.44	0.31	0.42	1.41

Family income level--dollars per year <sup>e</sup>	Per cent of total consumption											
	Dry navy beans						Canned baked beans					
	North & West, urban	North & West, rural	South, White, urban	South, White, rural	South, Negro, rural	United States	North & West, urban	North & West, rural	South, White, urban	South, White, rural	South, Negro, rural	United States
	13	14	15	16	17	18	19	20	21	22	23	24
	per cent						per cent					
Under 500	16.6	13.6	20.1	--	43.5	17.7	10.3	9.0	10.7	12.5	42.8	11.2
500-1,000	32.1	31.3	30.3	--	40.6	32.1	27.5	28.3	24.1	33.5	39.2	27.3
1,000-1,500	25.8	27.1	19.8	--	10.4	24.6	26.7	26.8	23.5	23.2	11.1	25.8
1,500-2,000	12.8	14.8	12.8	--	3.3	12.9	16.0	17.5	17.8	12.7	3.7	16.2
2,000-3,000	9.2	9.9	11.5	--	1.8	9.3	13.6	13.1	16.4	11.4	2.4	13.7
3,000-5,000	2.6	2.7	4.8	--	0.3	2.7	4.5	3.8	6.7	5.6	0.5	4.7
5,000-over	0.9	0.6	0.7	--	0.1	0.7	1.4	1.5	0.8	1.1	0.3	1.1
All levels	100.0	100.0	100.0	--	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lowest 25%	35	30	36	--	23	31	25	24	22	21	22	21
Second 25%	28	28	28	--	24	28	26	25	28	24	23	25
Third 25%	23	25	22	--	25	24	27	26	31	27	24	29
Highest 25%	14	17	14	--	28	17	22	25	19	28	31	25

(Continued on next page)







Table 32 continued.

a/ Primarily white varieties.

b/ For definitions of regions, see table 31.

c/ Urban includes all incorporated places over 2,500 and entire areas of Metropolitan districts defined by U.S. Census Bureau. Rural includes all other areas.

d/ White includes a relatively small number of non-White races other than Negro.

e/ Income includes money income and estimated money value of nonmoney income, such as rent on owned homes and food grown and consumed on farms.

Sources of data:

Estimated from freehand graphic relationships between per-capita income and per-capita consumption, and income points from table 31. Graphic relationships based on sample data, adjusted for number of persons per family and converted into pounds dry weight per year.

Cols. 1, 7:

U.S. Bureau of Labor Statistics. Family Expenditures in Selected Cities, 1935-36. Bulletin no. 648, vol. II, "Food." Washington, 1940. Data averaged over twenty-eight cities in the North and West regions.

Cols. 2, 8, 10:

U.S. Bureau of Home Economics. Family Food Consumption and Dietary Levels. Miscellaneous publications 405 and 452. Washington, 1941. Village and farm families averaged together.

Cols. 3, 5, 9, 11:

U.S. Bureau of Labor Statistics. Op. cit. Relationship in three southeastern cities assumed to apply to all southern cities; relationship for Negro families in three southeastern cities assumed to apply to all Negro families in the South, both urban and rural.

Cols. 6, 12:

Computed as weighted average of the five figures to the left; weights being the corresponding figure in table 31, columns 7 - 11. For dry navy beans, south white urban figures extrapolated to south white rural.

Cols. 13-24:

Computed from product of per-capita consumption (above) and per cent of persons (from table 31, columns 13-24). Twenty-five per cent points obtained from graphic estimation from Lorenz curves plotted from percentage data above.



Income Distribution in the United States and Per-Capita Consumption of  
Dry Beans and Canned Dry Beans by Income Levels, 1941-1942

Income level dollars per year per family <sup>a/</sup>	Income distribution			
	Per cent of persons	Number of persons	Per capita income	Per cent of income
	1 per cent	2 thousands	3 dollars per year	4 per cent
0- 500	11.9	14,700	122	2.3
500-1,000	16.0	19,764	266	6.8
1,000-1,500	15.1	18,581	414	9.9
1,500-2,000	16.0	19,646	511	13.0
2,000-3,000	23.0	28,327	717	26.2
3,000-over	18.0	22,185	1,466	41.8
All levels	100.0	123,203	629.5	100.0
Lowest 25%	25	30,801	176	7
Second 25%	25	30,801	428	17
Third 25%	25	30,801	630	25
Highest 25%	25	30,801	1,284	51

Income level dollars per year per family <sup>a/</sup>	Dry beans		Canned dry beans	
	Per-capita consumption	Per cent of to- tal consumption	Per-capita consumption	Per cent of to- tal consumption
	5 pounds per year	6 per cent	7 pounds per year	8 per cent
0- 500	23.5	22.1	0.71	8.2
500-1,000	19.0	24.0	0.92	14.4
1,000-1,500	14.9	17.8	1.15	17.0
1,500-2,000	12.2	15.4	1.19	18.6
2,000-3,000	8.4	15.2	1.22	27.4
3,000-over	3.9	5.5	0.82	14.4
All levels	12.7	100.0	1.02	100.0
Lowest 25%	21.3	42	0.82	20
Second 25%	14.7	29	1.06	26
Third 25%	9.6	19	1.26	31
Highest 25%	5.1	10	0.94	23

<sup>a/</sup> Income includes money income only.

Sources of data:

Cols. 1, 2, 3: U.S. Bureau of Labor Statistics. Family Spending and Saving in Wartime. Bulletin no. 822. Washington, D.C. Published figures on family basis adjusted for number of persons per family.

Col. 4: Computed from column 1 and column 3.

Cols. 5, 7: Estimated from freehand graphic relationships between per-capita income and per-capita consumption, and income points from column 3 above. Graphic relationships from U.S. Bureau of Human Nutrition and Home Economics. Family Food Consumption in the United States, Spring 1942. U.S. Department of Agriculture. Miscellaneous publication no. 550. Washington, D.C. Figures adjusted for number of persons per family and converted to pounds per year dry weight.

Cols. 6, 8: Computed from per-capita consumption (from columns 5 and 7) and per cent of persons (column 1).

25 per cent points estimated from Lorenz curves plotted from percentages above.







TABLE 34

All Dry Beans and Blackeyes: Estimated Consumption in the United States by Three Racial Groups and Two Major Regions, 1934-1936<sup>a</sup>

Racial group and region	Per cent of United States population 1936	All dry beans		Blackeyes	
		Per-capita consumption	Per cent of United States consumption	Per-capita consumption	Per cent of United States consumption
	1	2	3	4	5
	per cent	pounds per year	per cent	pounds per year	per cent
<u>White</u>					
North and West <sup>b/</sup>	65.7	5.7	45.4	0.3	10.7
South	23.2	11.2	31.4	1.5 <sup>c/</sup>	20.7 <sup>c/</sup>
All regions	88.9	7.1	76.8	0.6	31.4
<u>Negro</u>					
North and West <sup>b/</sup>	2.2	13.9	3.6	2.4	3.0
South	7.6	12.3	11.4	14.9 <sup>c/</sup>	65.6 <sup>c/</sup>
All regions	9.8	12.7	15.0	12.1	68.6
<u>Mexican</u>					
All regions	1.3	50.6	8.2	0	0
<u>All Groups</u>	100.0	8.2	100.0	1.7	100.0

a/ Based on samples of urban families of wage earners and clerical workers of low and medium incomes.

b/ For definition of regions, see table 31.

c/ Assumes consumption in rural areas equals consumption in urban areas. These Blackeyes consumed in rural areas are probably grown locally and not bought from California.

Source of data:

U. S. Bureau of Labor Statistics. Money Disbursements of Wage Earners and Clerical Workers, 1934-36. Bulletins 636-641. Washington, 1939-1941. Simple averages taken over all city groups where per-capita income is less than \$500. per year, and converted to pounds per year.



TABLE 35

All Dry Beans: Prices Received by Growers in Selected States, 1924-1948

Crop year <sup>a/</sup>	California	Michigan	New York	Idaho	Colorado	New Mexico	United States
	dollars per 100 pounds, cleaned basis						
1924	10.00	5.20	5.20	5.80	4.60	4.70	6.07
1925	6.90	4.15	5.60	4.80	3.85	4.50	5.00
1926	4.90	4.35	5.30	4.60	4.80	4.80	4.70
1927	6.10	5.90	6.50	4.95	5.20	5.10	5.78
1928	9.00	8.00	8.60	6.30	5.50	5.40	7.74
1929	8.40	6.70	7.40	6.10	4.90	4.80	6.83
1930	4.35	4.35	5.30	3.80	2.80	3.05	4.03
1931	2.70	1.80	2.30	1.70	1.40	1.65	2.08
1932	3.10	1.50	1.90	1.50	2.20	2.05	1.97
1933	3.45	2.25	3.10	2.20	2.90	2.90	2.78
1934	4.25	2.75	3.40	3.15	5.50	5.60	3.51
1935	4.00	2.25	3.00	2.55	2.75	2.90	2.95
1936	5.40	6.00	6.40	4.75	4.45	4.55	5.37
1937	3.45	2.55	3.30	2.45	3.80	3.85	3.10
1938	3.15	1.85	2.60	1.80	3.30	3.65	2.56
1939	3.85	2.80	3.45	2.60	3.40	3.60	3.25
1940	3.50	3.50	4.25	2.40	2.45	2.40	3.17
1941	5.40	4.55	5.40	3.60	3.40	3.50	4.54
1942	6.10	4.80	5.10	4.75	4.65	4.90	5.16
1943	6.80	5.90	6.10	5.60	5.70	5.70	6.05
1944	7.20	6.00	6.50	5.80	5.90	5.90	6.28
1945	7.70	6.20	7.10	6.20	5.50	5.60	6.55
1946	12.50	9.60	11.10	10.20	11.90	11.40	10.60
1947	14.80	12.40	11.90	9.20	10.10	9.10	11.60
1948	10.50	7.20	7.40	7.10	7.00	7.00	8.06

<sup>a/</sup> Season average.

## Sources of data:

- 1924-1940: U.S. Bureau of Agricultural Economics. Farm Production, Farm Disposition and Value of Dry Beans, 1909-1941. Washington, 1944.
- 1941-1944: U.S. Bureau of Agricultural Economics. Farm Production, Farm Disposition, and Value of Specified Field Crops. Revised Estimates, 1939-1944. Washington, 1948.
- 1945-1948: U.S. Bureau of Agricultural Economics. Agricultural Prices. Issues of December 1946, 1947 and 1948.

THE UNIVERSITY OF CHICAGO

Name		Address		City		State	
Mr. J. H. Smith		1234 N. Dearborn		Chicago		Ill.	
Mr. W. E. Jones		567 E. Madison		Chicago		Ill.	
Mr. C. D. Brown		890 W. Lake		Chicago		Ill.	
Mr. F. G. White		1011 S. Michigan		Chicago		Ill.	
Mr. H. K. Green		1212 N. Halsted		Chicago		Ill.	
Mr. L. M. Black		1413 E. Chicago		Chicago		Ill.	
Mr. P. Q. Grey		1614 W. Belmont		Chicago		Ill.	
Mr. R. S. Blue		1815 S. State		Chicago		Ill.	
Mr. T. U. Yellow		2016 N. La Salle		Chicago		Ill.	
Mr. V. W. Purple		2217 E. Taylor		Chicago		Ill.	
Mr. X. Y. Pink		2418 W. Hubbard		Chicago		Ill.	
Mr. Z. A. Brown		2619 S. Franklin		Chicago		Ill.	
Mr. B. C. Green		2820 N. Dearborn		Chicago		Ill.	
Mr. D. E. White		3021 E. Madison		Chicago		Ill.	
Mr. F. G. Black		3222 W. Lake		Chicago		Ill.	
Mr. H. I. Grey		3423 S. Michigan		Chicago		Ill.	
Mr. J. K. Blue		3624 N. Halsted		Chicago		Ill.	
Mr. L. M. Yellow		3825 E. Chicago		Chicago		Ill.	
Mr. N. O. Purple		4026 W. Belmont		Chicago		Ill.	
Mr. P. Q. Pink		4227 S. State		Chicago		Ill.	
Mr. R. S. Brown		4428 N. La Salle		Chicago		Ill.	
Mr. T. U. Green		4629 E. Taylor		Chicago		Ill.	
Mr. V. W. White		4830 W. Hubbard		Chicago		Ill.	
Mr. X. Y. Black		5031 S. Franklin		Chicago		Ill.	
Mr. Z. A. Grey		5232 N. Dearborn		Chicago		Ill.	
Mr. B. C. Blue		5433 E. Madison		Chicago		Ill.	
Mr. D. E. Yellow		5634 W. Lake		Chicago		Ill.	
Mr. F. G. Purple		5835 S. Michigan		Chicago		Ill.	
Mr. H. I. Pink		6036 N. Halsted		Chicago		Ill.	
Mr. J. K. Brown		6237 E. Chicago		Chicago		Ill.	
Mr. L. M. Green		6438 W. Belmont		Chicago		Ill.	
Mr. N. O. White		6639 S. State		Chicago		Ill.	
Mr. P. Q. Black		6840 N. La Salle		Chicago		Ill.	
Mr. R. S. Grey		7041 E. Taylor		Chicago		Ill.	
Mr. T. U. Blue		7242 W. Hubbard		Chicago		Ill.	
Mr. V. W. Yellow		7443 S. Franklin		Chicago		Ill.	
Mr. X. Y. Purple		7644 N. Dearborn		Chicago		Ill.	
Mr. Z. A. Pink		7845 E. Madison		Chicago		Ill.	
Mr. B. C. Brown		8046 W. Lake		Chicago		Ill.	
Mr. D. E. Green		8247 S. Michigan		Chicago		Ill.	
Mr. F. G. White		8448 N. Halsted		Chicago		Ill.	
Mr. H. I. Black		8649 E. Chicago		Chicago		Ill.	
Mr. J. K. Grey		8850 W. Belmont		Chicago		Ill.	
Mr. L. M. Blue		9051 S. State		Chicago		Ill.	
Mr. N. O. Yellow		9252 N. La Salle		Chicago		Ill.	
Mr. P. Q. Purple		9453 E. Taylor		Chicago		Ill.	
Mr. R. S. Pink		9654 W. Hubbard		Chicago		Ill.	
Mr. T. U. Brown		9855 S. Franklin		Chicago		Ill.	
Mr. V. W. Green		10056 N. Dearborn		Chicago		Ill.	
Mr. X. Y. White		10257 E. Madison		Chicago		Ill.	
Mr. Z. A. Black		10458 W. Lake		Chicago		Ill.	
Mr. B. C. Grey		10659 S. Michigan		Chicago		Ill.	
Mr. D. E. Blue		10860 N. Halsted		Chicago		Ill.	
Mr. F. G. Yellow		11061 E. Chicago		Chicago		Ill.	
Mr. H. I. Purple		11262 W. Belmont		Chicago		Ill.	
Mr. J. K. Pink		11463 S. State		Chicago		Ill.	
Mr. L. M. Brown		11664 N. La Salle		Chicago		Ill.	
Mr. N. O. Green		11865 E. Taylor		Chicago		Ill.	
Mr. P. Q. White		12066 W. Hubbard		Chicago		Ill.	
Mr. R. S. Black		12267 S. Franklin		Chicago		Ill.	
Mr. T. U. Grey		12468 N. Dearborn		Chicago		Ill.	
Mr. V. W. Blue		12669 E. Madison		Chicago		Ill.	
Mr. X. Y. Yellow		12870 W. Lake		Chicago		Ill.	
Mr. Z. A. Purple		13071 S. Michigan		Chicago		Ill.	
Mr. B. C. Pink		13272 N. Halsted		Chicago		Ill.	
Mr. D. E. Brown		13473 E. Chicago		Chicago		Ill.	
Mr. F. G. Green		13674 W. Belmont		Chicago		Ill.	
Mr. H. I. White		13875 S. State		Chicago		Ill.	
Mr. J. K. Black		14076 N. La Salle		Chicago		Ill.	
Mr. L. M. Grey		14277 E. Taylor		Chicago		Ill.	
Mr. N. O. Blue		14478 W. Hubbard		Chicago		Ill.	
Mr. P. Q. Yellow		14679 S. Franklin		Chicago		Ill.	
Mr. R. S. Purple		14880 N. Dearborn		Chicago		Ill.	
Mr. T. U. Pink		15081 E. Madison		Chicago		Ill.	
Mr. V. W. Brown		15282 W. Lake		Chicago		Ill.	
Mr. X. Y. Green		15483 S. Michigan		Chicago		Ill.	
Mr. Z. A. White		15684 N. Halsted		Chicago		Ill.	
Mr. B. C. Black		15885 E. Chicago		Chicago		Ill.	
Mr. D. E. Grey		16086 W. Belmont		Chicago		Ill.	
Mr. F. G. Blue		16287 S. State		Chicago		Ill.	
Mr. H. I. Yellow		16488 N. La Salle		Chicago		Ill.	
Mr. J. K. Purple		16689 E. Taylor		Chicago		Ill.	
Mr. L. M. Pink		16890 W. Hubbard		Chicago		Ill.	
Mr. N. O. Brown		17091 S. Franklin		Chicago		Ill.	
Mr. P. Q. Green		17292 N. Dearborn		Chicago		Ill.	
Mr. R. S. White		17493 E. Madison		Chicago		Ill.	
Mr. T. U. Black		17694 W. Lake		Chicago		Ill.	
Mr. V. W. Grey		17895 S. Michigan		Chicago		Ill.	
Mr. X. Y. Blue		18096 N. Halsted		Chicago		Ill.	
Mr. Z. A. Yellow		18297 E. Chicago		Chicago		Ill.	
Mr. B. C. Purple		18498 W. Belmont		Chicago		Ill.	
Mr. D. E. Pink		18699 S. State		Chicago		Ill.	
Mr. F. G. Brown		18900 N. La Salle		Chicago		Ill.	
Mr. H. I. Green		19101 E. Taylor		Chicago		Ill.	
Mr. J. K. White		19302 W. Hubbard		Chicago		Ill.	
Mr. L. M. Black		19503 S. Franklin		Chicago		Ill.	
Mr. N. O. Grey		19704 N. Dearborn		Chicago		Ill.	
Mr. P. Q. Blue		19905 E. Madison		Chicago		Ill.	
Mr. R. S. Yellow		20106 W. Lake		Chicago		Ill.	
Mr. T. U. Purple		20307 S. Michigan		Chicago		Ill.	
Mr. V. W. Pink		20508 N. Halsted		Chicago		Ill.	
Mr. X. Y. Brown		20709 E. Chicago		Chicago		Ill.	
Mr. Z. A. Green		20910 W. Belmont		Chicago		Ill.	
Mr. B. C. White		21111 S. State		Chicago		Ill.	
Mr. D. E. Black		21312 N. La Salle		Chicago		Ill.	
Mr. F. G. Grey		21513 E. Taylor		Chicago		Ill.	
Mr. H. I. Blue		21714 W. Hubbard		Chicago		Ill.	
Mr. J. K. Yellow		21915 S. Franklin		Chicago		Ill.	



TABLE 36

Dry Beans, Principal California Varieties:  
Dealers' F.O.B. Prices,<sup>a/</sup> 1924-1948

Year beginning September 1	Standard Limas	Baby Limas	Small White	Pink	Blackeye	Red Kidney
	1	2	3	4	5	6
	dollars per 100 pounds, cleaned basis					
1924	13.78	12.64	7.31	7.42	9.54	--
1925	9.79	9.44	5.94	5.50	5.62	--
1926	6.00	5.06	6.60	5.00	3.79	--
1927	7.38	7.54	7.49	5.46	4.85	--
1928	12.14	10.70	9.07	6.54	9.37	--
1929	11.61	10.38	7.81	5.83	8.25	--
1930	6.72	4.79	4.50	3.71	3.21	8.23
1931	4.17	2.76	2.62	2.91	2.42	3.16
1932	4.65	3.90	3.16	3.00	3.31	3.43
1933	5.43	3.67	3.38	3.22	2.88	5.87
1934	5.47	3.83	3.45	5.36	3.98	6.14
1935	6.54	5.23	3.57	3.02	4.47	5.71
1936	7.12	5.32	6.34	4.81	4.90	8.25
1937	4.76	3.08	2.92	4.40	2.79	4.63
1938	4.42	2.82	2.32	3.29	3.24	3.84
1939	4.76	3.32	3.79	4.30	4.57	5.36
1940	5.10	3.61	3.77	3.29	2.76	8.44
1941	7.79	5.47	4.94	5.04	5.17	6.80
1942	7.97	6.62	5.62	5.71	5.84	6.28
1943	8.03	6.73	5.83	6.03	5.98	6.33
1944	8.40	7.10	6.20	6.40	6.35	6.70
1945	8.67	7.33	6.48	6.73	6.66	7.01
1946	18.54	11.13	15.38	14.23	18.32	14.55
1947	23.91	10.12	15.25	14.16	17.75	14.40
1948 <sup>b/</sup>	17.92	8.57	9.07	8.95	7.19	11.18

- <sup>a/</sup> Dealers' quotations to distributors F.O.B. country shipping points for U.S. No. 1 grade in carlots, excluding brokerage. Simple average of weekly prices.  
<sup>b/</sup> Six-month average, September-February.

Sources of data:

- 1924-1929 (except col. 6): Pond, Reed K. Economic Data for Dry Edible Beans, 1924-1940, Washington, U.S. Surplus Marketing Administration, 1941. Table 27, page 40.  
1930-1940: U.S. Production and Marketing Administration, Bean Market Information Bulletin No. 441, Sacramento, April 1948, pp. 1-3.  
1941-1948: U.S. Production and Marketing Administration, San Francisco Bean Market Review, Vol. XIX, No. 34, August 26, 1948, and weekly issues during the months September 1948 to March 1949.



TABLE 37

All Dry Beans: Production and Marketing Costs as  
Percentage of Consumers' Dollar - United States, 1939

	Canned and dry beans	Canned beans	Dry beans
	per cent	per cent	per cent
Farm production	29.7	14.2	43.8
Assembly	8.7	4.2	12.9
Transportation	4.3	2.0	6.3
Processing	20.9	44.1	0
Wholesaling	10.5	12.8	8.3
Retailing	25.9	22.7	28.7
Total	100.0	100.0	100.0

Source of data: Stokes, Donald R. Marketing Margins and Costs for Grains, Grain Products, and Dry Edible Beans. Washington, D. C. U.S. Bureau of Agricultural Economics. 1947. Figure 16, page 68.

# TABLE I

Summary of the results of the experiments on the effect of the concentration of the solution on the rate of reaction.

Concentration of solution (M)	Rate of reaction (M/min)	Time taken (min)	Volume of gas evolved (ml)
0.1	0.001	100	10
0.2	0.002	50	20
0.3	0.003	33	30
0.4	0.004	25	40
0.5	0.005	20	50
0.6	0.006	16	60
0.7	0.007	14	70
0.8	0.008	12	80
0.9	0.009	11	90
1.0	0.010	10	100

The above table shows that the rate of reaction increases with the concentration of the solution. The time taken for the reaction to complete decreases as the concentration increases. The volume of gas evolved also increases with the concentration of the solution.